

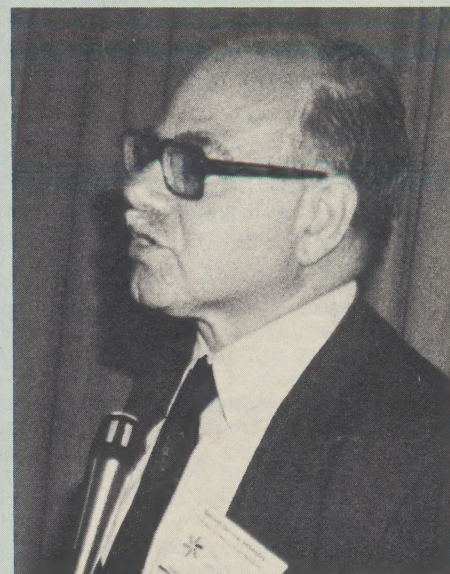
Your Invitation to the
First Global Conference on the Future

THROUGH THE 80s

Thinking Globally, Acting Locally



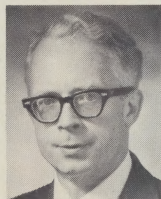
July 20-24, 1980
Toronto, Ontario
Canada



AN INVITATION TO EXPLORE THE FUTURE



Edward Cornish, President
World Future Society



Lou D'Amore, President
Canadian Futures Society



"The 1980s promise to be a decade of fantastic progress. Stupendous advances are anticipated in communications, electronics, biotechnology, and space exploration. But this decade also threatens us with mounting and potentially explosive problems. The world's population is expected to grow more than in any previous decade of history, and more and more nations will have atomic weapons.

The First Global Conference on the Future is a world forum for discussing many of the possible solutions to our problems. To people of all nations and stations, we address a warm invitation to come to Toronto and join us in this significant event."

"The First Global Conference on the Future comes at a most opportune time. It is the start of a new decade—a decade which several noted futurists believe will be a decade of transition. It is a time for soul-searching as resource limitations begin to surface, economic systems falter, and international tensions rise. It is a time for discovery—of new frontiers, new technologies, and new problem-solving approaches. Most importantly, it is a time for dialogue and sharing of aspirations and new directions for a "born again" global society. The Canadian Futures Society is most pleased to join with the World Future Society in sponsoring the First Global Conference on the Future."

An Introduction

The Third General Assembly of the World Future Society and the annual meeting of the Canadian Futures Society are being combined this year to form the First Global Conference on the Future. Expected to be the largest international futures conference ever held, this unique event is being organized with the cooperation of numerous associations, institutes, corporations, and other organizations interested in what may happen during the new decade. The conference will be held July 20-24 at the Harbour Castle Convention Centre and the Royal York Hotel in Toronto.

More than 4,000 registrants are expected for the First Global Conference, surpassing by far the 2,800 people who attended the very successful Second General Assembly of the World Future Society in Washington, D.C., in 1975. The participants will include representatives from hundreds of research institutes, government agencies, businesses, and universities from around the world. A concerted effort is being made to ensure significant Third World representation, so that the conference will be truly international in scope.

The theme of the conference, "Through the 80s: Thinking Globally, Acting Locally," was chosen to underline the fact that the world has entered a decade of decision. In every area of human activity and in every corner of the globe, the choices made

by individuals, by government and business leaders, and by teachers and administrators during the next 10 years will influence the direction of change and establish the range of available options for the twenty-first century. In panels, speeches,

workshops, and question-and-answer sessions, distinguished scientists, scholars, educators, urban and corporate planners, theologians, researchers, writers, policymakers, statesmen, and other individuals of goodwill and vision will address specific questions of worldwide concern and explore specific opportunities for direct local action on these problems.

In order to assist participants in focusing on particular aspects of the future, the conference program has been organized into 21 different "tracks" or subject areas, which will emphasize three major "streams" (human, global, and management concerns). Each track will have 10 or more sessions plus a number of individual presentations. Joint sessions will also be held, in order to link together the individual subject areas and provide an integrated, holistic outlook on the future.

In addition to the formal sessions listed below, a number of brief individual presentations will be scheduled, and space will be available for ad-hoc sessions organized during the conference. The Program Committee is working to ensure the broadest participation possible, subject to the limits of time and space.

The planning of the conference is still in progress. The following pre-program therefore is incomplete and will be supplemented by additional sessions (both formal and informal) still in the process of organization.

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For further information:

World Future Society
4916 St. Elmo Avenue
Washington, D.C. 20014 U.S.A.
301/656-8274

In Canada:
416/361-1080

TEN REASONS WHY YOU SHOULD ATTEND THE FIRST GLOBAL CONFERENCE ON THE FUTURE

1. To hear leading futures thinkers from around the world. Never before have so many prominent futurists met together in one place for a common purpose. The Toronto Conference offers you the chance to meet face to face, learn from, and talk to many of the men and women whose ideas are creating new visions of tomorrow.

2. To speak out on the issues of concern to you, your family, friends, and community as you enter the 1980s. In keeping with the theme "Thinking Globally, Acting Locally," the Toronto Conference will provide opportunities for everyone to be an active participant in workshops, open floor debates, question-and-answer sessions, and unstructured "spontaneous sessions" through the meeting. Whatever your hopes—or fears—for the coming decade, you'll find receptive listeners—and challenging responses—at the First Global Conference on the Future.

3. To learn, at seminars, workshops, and simulation exercises, actual techniques of long-range planning, futures thinking, and imaging that you can use at home, in school, and on the job to clarify your values, sharpen your thinking, and help you make decisions you—and those around you—can live with in the present and the future.

4. To see examples of today's most innovative technologies along with models, images, drama-

tic film presentations, and artistic visions of alternative tomorrows at the Royal York Hotel and at the Futures Fair to be held at Harbourfront, on the shores of Lake Ontario.

5. To do business—No matter what your present job, or what your career goal may be, the sessions, seminars, and workshops being offered at the Toronto Conference can alert you to new profit possibilities, potential risks and dangers to be wary of in the 1980s, and help you to identify important signs of economic and social change underway at national and global levels. They may even point out new career possibilities for the future that never existed before.

6. To gain new insights—This global conference on the future offers you the opportunity to learn, firsthand, how representatives of many non-Western and Third World nations view issues of regional and global futures concern. Compare their insights and opinions with your own perspectives, and those of scholars, planners, and decision-makers from throughout the U.S., Canada, and Europe.

7. To form new friendships—Futures thinking isn't just something for "professionals." Students, families, neighborhoods, citizens' groups, and networks of interested individuals from many widely scattered locations all contribute to shaping a more desirable future by sharing their experience, knowledge, and ideas. This

global conference, like previous meetings of the Canadian Futures Society and the World Future Society General Assemblies, offers an ideal setting for you to meet other future-conscious individuals, and establish networks of common interest and concern.

8. To participate in the most important single membership activity offered by your Society. Both the World Future Society and the Canadian Futures Society will have headquarters staff at the Toronto Conference to answer your questions about existing programs and activities and discuss possibilities for new initiatives in the 1980s. There will even be a special free workshop on how to form and maintain an active local chapter in your area.

9. To share with your family the excitement of a look into the future. Special future-related activities and tours will be available for children during the Toronto Conference, and participants of all ages are welcome to attend any of the regular conference sessions, as well as the exhibits and the Futures Fair.

10. To enjoy the fun and beauty of Toronto—one of the world's most modern cities—and the scenic and historic attractions of Ontario. Plan to arrive before the conference starts, or stay on for a few days extra when it ends, and treat yourself and your family to a Canadian vacation you will long remember.

Pre-Conference Activities

SATURDAY, JULY 19

8:30 a.m.-5:00 p.m. Pre-Conference Seminars and Courses

SUNDAY, JULY 20

8:30 a.m.-5:00 p.m. Pre-Conference Seminars and Courses

1:00 p.m. Registration

2:00 p.m.-5:00 p.m. Beating the Futures Conference Game!

A new preconference innovation to give those attending the First Global Conference on the Future the chance to "tune-in" on the basic lines of futurist thought before the conference begins. At the conference, you will be bombarded by myriad—and sometimes conflicting—messages from a wide spectrum of speakers, including visionaries, social activists, and professional modellers, planners, forecasters, and futurists (whose messages may be obscured by their equally professional language—or jargon). How can you mold this mass of information into some coherent picture of the futures that are possible, or likely, for yourself, your family, your country, and the world?

Thanks to the systems approach, we can at least show what is at stake; how social, technical, economic marketing, and philosophic approaches link up; why we can discuss the future in different ways and how this can and does so often give rise to crosstalk and confusion; and where we

need new thinking relevant to our times. So if you want to do more than just listen, join us at this special Sunday preconference event and discover how to make the First Global Conference on the Future serve you!

Presenter: **Clive Simmonds**, policy analyst, National Research Council of Canada, Ottawa, Canada

6:00 p.m. Welcoming Reception

The opening ceremonies will offer futurists an opportunity to meet in a relaxed social setting.

Master of Ceremonies: **Frank Feather**, Chairman of the First Global Conference on the Future

Welcoming Remarks by **Edward R. Schreyer**, Governor General of Canada and Honorary Patron of First Global Conference on the Future, and other dignitaries of the Province of Ontario and City of Toronto

Lou D'Amore, president, Canadian Futures Society

Edward Cornish, president, World Future Society, and editor of *THE FUTURIST*

Presentation of awards to **Marshall McLuhan**, author of *Understanding Media*, Canadian professor of communications, and **Bertrand de Jouvenel**, French author, philosopher, and futurist, author of *The Art of Conjecture*

"The Challenge of the 80s"—address by **Willis W. Harman**, Center for the Study of Social Policy, SRI International, Menlo Park, California

Conference Opening

MONDAY, JULY 21

8:30 a.m.-12:15 p.m.
Opening Plenary Session

Prospects for Humanity During the 1980s

The opening plenary session will bring together an international group of outstanding future-oriented thinkers to present their views on the outlook for the world during this decade. Crucial issues will be addressed from global, human, and management perspectives.

Presiding: Senator **Maurice Lamontagne**, Parliament, Ottawa, Canada

Lester R. Brown, president, Worldwatch Institute, author of *World Without Borders*, Washington, D.C.

Bertrand de Jouvenel, political scientist, economist, philosopher, Oise, France
Theodore J. Gordon, corporate executive in policy analysis, planning, and forecasting, president of The Futures Group, Inc., Glastonbury, Connecticut

Hazel Henderson, author, social critic, civic activist, co-director of the Princeton Center for Alternative Futures, Inc., Princeton, New Jersey

Robert Jungk, writer and professor of planning sciences. Technical University, Berlin, Federal Republic of Germany

Herman Kahn, director of Hudson Institute, Croton-on-Hudson, New York

Eleonora Masini, sociologist, Secretary General of the World Future Studies Federation, Rome, Italy

Rashmi Mayur, urban systems scientist and environment planner, director of Urban Development Institute, Bombay, India

Magda McHale, artist and trend analyst, director of Center for Integrative Studies and research professor in environmental design, School of Architecture and Environmental Design, State University of New York, Buffalo, New York

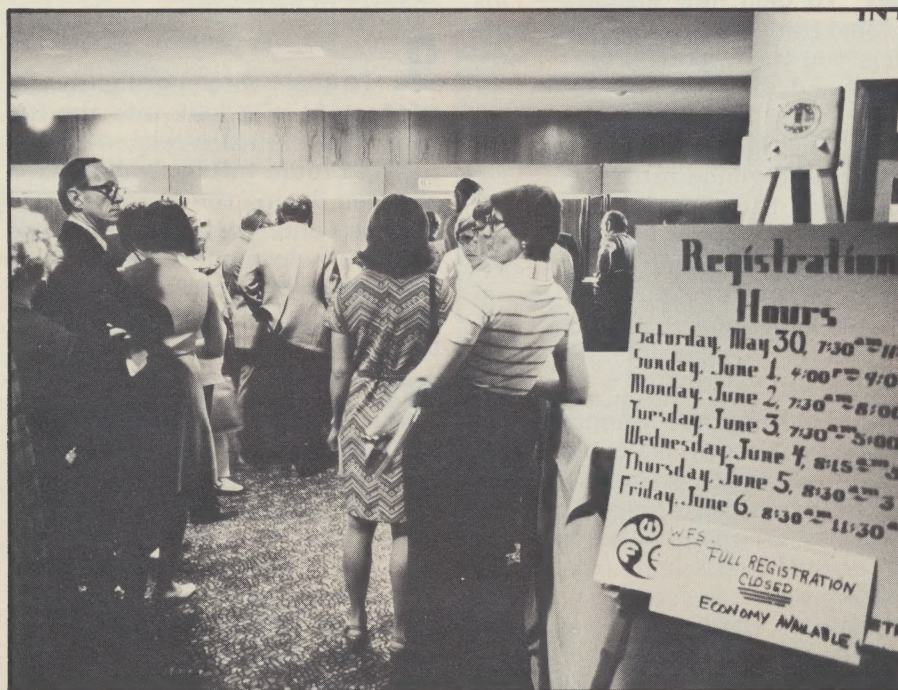
Aurelio Peccei, industrial manager (retired) and co-founder of The Club of Rome, Rome, Italy

Rafael Salas (Philippines), executive director, United Nations Fund for Population Activities, New York, New York

Maurice F. Strong, corporation executive, former director of the United Nations Environment Programme and chairman of the Stockholm Conference on the Environment and of the Vancouver Conference on Habitats, Canada.

Robert Theobald, generalist, lecturer and writer in the area of futures, Wickenburg, Arizona

Andre van Dam, corporate planner and economist, Director of Planning for Latin America, CPC International, Inc., Buenos Aires, Argentina



Conference Closing

THURSDAY, JULY 24

3:00 p.m.-5:00 p.m. Closing Plenary Session

Imperatives for Tomorrow

What needs to be done by individuals and organizations in the 1980s in order to have a better future world?

Presiding: **Maurice F. Strong**, Honorary Conference Chairman

Roy Amara, president, senior research fellow, Institute for the Future, Menlo Park, California

Marvin J. Cetron, president, Forecasting International, Ltd., Arlington, Virginia
Harlan Cleveland, political scientist, Aspen Institute for Humanistic Studies, Princeton, New Jersey

Mahbub ul Haq, director, Policy Planning and Review Department, World Bank, Washington, D.C.

Alexander King, chairman, The International Federation of Institutes of Advanced Study, Paris, France
 Concluding Remarks by **Frank Feather**, Conference Chairman

Closing Address: "Imperatives for Tomorrow" by the Right Honorable **Pierre Elliott Trudeau**, Prime Minister of Canada (invited)

Schedule

(Note: Times and events subject to change)

Principal Sites: Toronto Harbour Castle and Royal York Hotels

Saturday, July 19, 1980

8:30 A.M.-5:00 P.M. Pre-Conference Educational Courses and Seminars

Sunday, July 20, 1980

8:30 A.M.-5 P.M. Pre-Conference Educational Courses and Seminars
 1:00 P.M. Conference Registration begins
 2:00 P.M.-5:00 P.M. Beating the Futures Conference Game!
 6:00 P.M. Welcoming Reception and Opening Ceremony (Welcoming by Governor General of Canada, City of Toronto and Ontario Province officials, etc.)

Monday, July 21, 1980

8:30 A.M.-12:15 P.M. Opening Plenary Session in the Metropolitan Room
 12:30-2:00 P.M. Keynote Lunches
 2:30-4:00 P.M. Concurrent Sessions
 4:30-6:00 P.M. Concurrent Sessions
 6:30 P.M. Reception for Institutional Members and Corporate Sponsors
 8:00-9:30 P.M. Evening Sessions, Social Activities, etc.

Tuesday, July 22, 1980

8:30-10:00 A.M. Concurrent Sessions
 10:30-12:00 noon Concurrent Sessions
 12:30-2:00 P.M. Keynote Lunches
 2:30-4:00 P.M. Concurrent Sessions
 4:30-6:00 P.M. Concurrent Sessions
 8:00-9:30 P.M. Evening Sessions, Social Activities, etc.

Wednesday, July 23, 1980

8:30-10:00 A.M. Concurrent Sessions
 10:30-12:00 noon Concurrent Sessions
 12:30-2:00 P.M. Keynote Lunches
 2:30-4:00 P.M. Concurrent Sessions
 4:30-6:00 P.M. Concurrent Sessions
 8:00-9:30 P.M. Evening Sessions, Social Activities, etc.

Thursday, July 24, 1980

8:30-10:00 A.M. Concurrent Sessions
 10:30-12:00 noon Concurrent Sessions
 1:30-2:45 P.M. Concurrent Sessions
 3:00-5:00 P.M. Closing Plenary in the Metropolitan Room

Friday, July 25, 1980

9:00-5:00 P.M. Post-Conference Educational Courses and Seminars

Saturday, July 26, 1980

9:00-5:00 P.M. Post-Conference Educational Courses and Seminars

Conference Organization

The Right Honorable Edward R. Schreyer, the Governor General of Canada, is Honorary Patron of the First Global Conference on the Future.



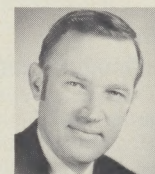
Maurice F. Strong, Honorary Conference Chairman, is a Canadian corporation executive who served as director of the United Nations Environment Programme and was chairman of the Stockholm Conference on the Environment and of the Vancouver Conference on Habitats.



Frank Feather, Conference Chairman and Director General, is Superintendent-Domestic Regions for the Canadian Imperial Bank of Commerce. He is also vice-president of the Canadian Futures Society and editor of *Business Tomorrow*.



Graham T.T. Molitor, Program Director—WFS, is president of Public Policy Forecasting, Inc. He was research director for the White House Conference on *The Industrial World Ahead: A Look at Business in 1990*, and was also chairman of the World Future Society's Second General Assembly.



Peter W. Main, Program Director—CFS, is executive director of Co-ordinated Arts Services. His experience includes 12 years of work in the developing countries, primarily in the area of human resources management.



Management Concerns • Global Concerns

HUMAN CONCERNS

Human Behavior and Social Organization

The recent appearance of Homo Sapiens, a "self-evolving" mammal, has already altered the physical features of Earth, Earth's moon, Venus, and Mars. Even while this creative mammal makes its presence known in space, it continues to breed uncertainty, disorganization, and privations within its own ranks. This track seeks to examine underlying human behavior and how it influences cooperative human response to meet complex environmental challenges.

Human behavior will especially be approached through the evolution of roles and rights of women and children. Cooperative efforts will be examined through the medium of the family and voluntary organizations. Special sessions will focus on approaches to institutionalized values related to a futures perspective and human response to new technologies.

Track Organizer:

Arthur Harkins, professor, College of Education, University of Minnesota, Minneapolis, Minnesota

1101

Critical Issues in the Emergence of Global Communities

The reality of global communities is here. As an ecology of global communities develops, issues surrounding this phenomenon leave the realms of idealism and propaganda. They become problems and sources of opportunities for futures study, research, and action.

Michelle Small - Moderator, Futures Program, University of Minnesota, Minneapolis

Allen Wilcox, professor, University of Nevada, Reno, Nevada

Ponna Wignaraja, social scientist, United Nations University, Tokyo, Japan

John Jordan, research director, Future Directions Project, York University, Downsview, Ontario, Canada

1102

Multicultural and Multilingual Societies

An increasing number of countries are becoming multicultural and multilingual, with many new immigrants from India, Africa, Korea, Europe, etc. This session focuses on multicultural and multilingual societies in three aspects: the past experiences of multicultural and multilingual countries such as Switzerland and Belgium; the current issues in bilingualism in countries such as Canada and the United States; the future situations in countries such as Saudi Arabia.

Magoroh Maruyama - Moderator, professor, Department of Administrative Sciences, Southern Illinois University, Carbondale, Illinois

Jerzy Wojciekowski, professor of philosophy, Department of Philosophy, University of Ottawa, Canada

Jean-Pierre Landry, professor of biology, College of Sherbrooke, Sherbrooke, Quebec, Canada

H. Zeier, professor of behavioral science, Institut für Verhaltenswissenschaft ETH-Zentrum, Zurich, Switzerland

K.G. O'Brian, professor, Addiction Research Foundation, Toronto, Ontario, Canada

Jacques Debulpaep, program officer, futures research, King Baudouin Foundation, Brussels, Belgium

1103

People Development in the Third World

Development programs have been undertaken by the governments of developing countries not only to uplift the poor but also to introduce modern techniques or innovations for bringing about changes in desirable directions. How can this be achieved? Two intervention techniques are discussed in depth: the harmony model and the conflict model. The latter model, the author concludes, has the potency of mobilizing people at grass roots for effective and active participation.

T. Moulik, professor, Indian Institute of Management, Ahmedabad, India

1104

Voluntary Action: Creative Force for the Future

The potential for voluntary action is increasing as experienced retired people increase in numbers and the work-week is shortened for paid workers. This session will focus on how computerized responsive networks can be of benefit to both society and the volunteer.

Richard Scott, Scott Services, Midland, Ontario, Canada

1105

From Limits to Growth: The Expansion of Human Choices

Self-definitions and social interactions influence whether we are proactive or reactive to technological, political, and socio-cultural inventions. Our Western heritage burdens us with certain limiting and destructive rules and regulations for self and society, with negative results in coping with tomorrows. This symposium will focus on self-stereotypes, new approaches to self-identity, educational heterogeneity, and new definitions of human resources. The focus is upon the positive consequences of new human definitions and social technologies that enhance future choices.

Elizabeth Wroblewski - Moderator, Futures Program, University of Minnesota, Minneapolis, Minnesota

Marlene Goldsmith, teaching associate, Futures Program, University of Minnesota, Minneapolis

Willis Bright, University of Minnesota, Minneapolis

Geoffrey Maruyama, Future Program, University of Minnesota, Minneapolis

Winifred Warnat, director, Teachers Corps Project on Adult Learning, American University, Washington, D.C.

1106

Hispanics in the United States: Yesterday, Today, and Tomorrow

Will examine the multiple impacts of the growth of Hispanics in the United States and an agenda for the 1980s. There will be a comparison of Hispanics in the United States and those in Latin America.

Roberto Ansón, policy analyst, specialist on aging, 1981 White House Conference on Aging, Washington, D.C.

José de la Puente, chief of health services research, U.S. Department of Health and Social Services, Rockville, Maryland

Carmen Meneses, housing program specialist, U.S. Department of Housing and Urban Development, Washington, D.C.

1107

Alternative Futures for Women

A United Nations survey recently reported that the world's women can be raised to equality with the male population only by "political, social, and cultural change on a

scale unprecedented in human history." This symposium will discuss beliefs and attitudes affecting women's futures, various feminist points of view on equality, possible impacts of such positions, and redefinitions that may free a reservoir of undeveloped potential in women around the world.

Linda Capek Armstrong - Moderator, Futures Program, University of Minnesota, Minneapolis

Waneta Fletcher, associate director, Adult Learning Potential Institute (Teacher Corps), American University, Washington, D.C.

Jeana Wirtenberg, research associate, Women's Research Team, National Institute of Education, Washington, D.C.

Elizabeth Wroblewski, Futures Program, University of Minnesota, Minneapolis

Eleonora Masini, secretary-general, World Future Studies Federation, Rome, Italy

1108

Human Status, Power, and Development Issues for the Future

Social "rating" and "ranking" of all humans begins with the fact of birth. Where one human "stands" as regards any other is directly regulated by this and many other social mechanisms that influence future choices. Problems with and alternatives to these "automatic" social mechanisms are discussed.

W. Basil McDermott - Moderator, faculty member, Simon Fraser University, Burnaby, British Columbia, Canada

Lucien X. Lombardo, professor, Old Dominion University, Norfolk, Virginia

Joseph Berman, chairman, The Agora Foundation, Toronto, Ontario, Canada

Ed Waitzer, The Agora Foundation, Toronto, Ontario, Canada

1109

Cultural Settings and Their Influence on the Institutionalization of a Futures Perspective (Part I)

The emergence of futures research as a discipline must not only depend upon the identification of theories and methods appropriate to a new discipline, but also upon the cultural and social factors enhancing or inhibiting the professionalization process. This session coordinates further discussion toward the goal of elaborating such contextual factors and their impacts upon futures research.

Arthur Harkins - Moderator, professor, Futures Program, University of Minnesota, Minneapolis

Alejandro Piscitelli, GEOSINTESIS, Alternatives for Cultural Dissemination, Capital Federal, Argentina

John Brownell, research associate, East-West Center, Honolulu, Hawaii

Earl Joseph, staff futurist, Sperry Univac, St. Paul, Minnesota

Christopher Dede, special fellow, Planning Office, National Institute of Education, Washington, D.C.

1110

Cultural Settings and Their Influence on the Institutionalization of a Futures Perspective (Part II)

The emergence of futures research as a discipline must not only depend upon the identification of theories and methods appropriate to a new discipline, but also upon the cultural and social factors enhancing or inhibiting the professionalization process. This session coordinates further discussion toward the goal of elaborating such contextual factors and their impacts upon futures research.

Arthur Harkins - Moderator, professor, Futures Program, University of Minnesota, Minneapolis

Wendell Bell, professor, Department of Sociology, Yale University, New Haven, Connecticut

Gayle Hudgins, Dallas, Texas

William Reckemeyer, San Jose State University, San Jose, California

1111

Learning to Live More Modestly in the Future

Due to the energy crisis, it is highly advisable if not imperative that people in advanced nations learn to live more modestly in the future.

Francis R. Allen - Moderator, professor, Department of Sociology, Florida State University, Tallahassee, Florida

Rufus Miles, Jr., senior fellow, Woodrow Wilson School, Princeton, New Jersey

Carter Henderson, co-director, Princeton Center for Alternative Futures, Inc., Princeton, New Jersey

1112

Research Reports: Cultural Impacts of Emerging People-Amplifying (Ethnotronic) Appliances

People-amplifying appliances (PAAs) that can vastly alter American and other cultures in the 1980s are emerging. Such appliances are early examples of ethnotronic or culture-bearing electronic systems, capable of machine/human and machine/machine interaction. The papers in this session report on early empirical futures research into the impacts of PAAs.

Arthur Harkins - Moderator, professor, University of Minnesota, Minneapolis, Minnesota

Courtney Peterson, Futures Program, University of Minnesota, Minneapolis

Glen Palm, Futures Program, University of Minnesota, Minneapolis

Earl C. Joseph, staff futurist, Sperry Univac, St. Paul, Minnesota

Darlene Weigand, president, Derby Association, Minneapolis, Minnesota

1113

Issues in Our Family and Community Life: A Familial Point of View

Recognition of the active and vital contribution of diverse and evolving patterns of family life to resolving characteristic dilemmas of industrialized societies will focus this panel presentation. Implications of new orientations toward learning, health, communications, and economics for the quality of personal relationships will be identified to stimulate a genuine exchange of ideas among session participants.

Robert Glossop - Moderator, researcher, Vanier Institute of the Family, Ottawa, Canada

Alan Mirabelli, coordinator of Communications and Research, Vanier Institute of the Family, Ottawa, Canada

J. Tom Webb, researcher, Vanier Institute of the Family, Ottawa, Canada

1114

Futures-Oriented Human Dialoguing

Futures-oriented human dialogue research efforts are aimed at improving the sharing of individual perceptions and the development of a larger sense of environment.

Tom Polhemus - Moderator, Futures Program, University of Minnesota, Minneapolis

Donald Ayre, executive director, Housing and Urban Development Association, Winnipeg, Manitoba, Canada

John Ball, professor, Georgia State University, Atlanta, Georgia

Allen Tough, associate professor, The Ontario Institute for Studies in Education, Toronto, Ontario, Canada

ADDITIONAL COPIES ARE AVAILABLE!

If you would like more copies of this program for distribution to friends and colleagues, please contact the Washington Conference Office at:
World Future Society
4916 St. Elmo Avenue
Washington, D.C. 20014, U.S.A.

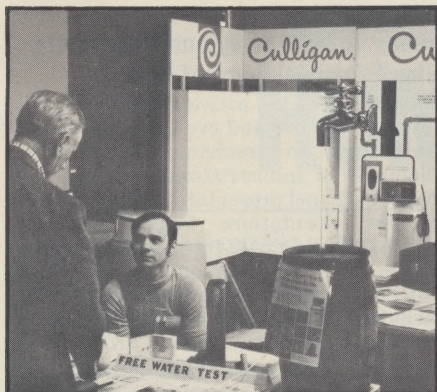
Because we are using several mailing lists, some duplication is unavoidable. If you received more than one copy of this announcement, please give it to a friend or colleague who may be interested.

Second General Assembly photos:

Mico Delianova

Art Director: Diane Smirnov

Editorial Coordinator: Jerry Richardson



1115

Senior Citizens As Futurists

Explores the contribution that older people can make to the planning of alternative world futures, drawing upon their knowledge of human behavior and their lifetime experience in social organizations and creative change. Rooted in the values and lifestyles of their Victorian past, senior citizens born before 1920 have witnessed a dazzling succession of social and technological changes and have formed an important societal bridge between the nineteenth and twenty-first centuries.

Frank Snowden Hopkins - Moderator, vice-president, World Future Society, Washington, D.C.

Francis R. Allen, professor, Department of Sociology, Florida State University, Tallahassee, Florida

Earl D.C. Brewer, theologian and professor of sociology and religion, Emory University, Atlanta, Georgia.

1116

Workshop: Community Participation by Children in Futures Project (Gruppo Futuro)

This presentation will involve (a) an exhibition of drawings, writings, futures questions, futures answers, models, photos, audiocassettes, color slides, etc., made by participating children in this project (from Naples, Oxford and Ottawa) and (b) a discussion (informal) of the implications of all this work: that is, not a lecture in an auditorium, but a seminar, people sitting in a circle, in order to facilitate a discussion and answer questions about the exhibit.

Simon Nicholson, artist, The Open University, Oxford, England, United Kingdom

1117

Ethnographic Futures Research: Its Epistemology and Its Cultural Uses

Ethnographic Futures Research (EFR) is a blend of (1) traditional cultural anthropology field techniques, and (2) certain features of intuitive forecasting drawn principally from the Delphi method. Reliability and validity problems are treated

differently in EFR as they are, or should be, in Delphi. Textor will demonstrate EFR through lecture, video tape, and interaction with discussants and audience members.

Robert B. Textor - Moderator, professor, Department of Anthropology, Stanford University, Stanford, California
Glen Palm, Futures Program, University of Minnesota, Minneapolis, Minnesota

1118

The Future of the Family

In the future, the concept of family will become more diffuse, more wide-ranging as the family itself develops a multiplicity of both form and function. There can be no denying the exploration of new marital forms and behavior. Legal forms have already yielded to the new mores so that law, like religion, no longer seeks a single standard in shaping the behavior of society.

Robert Thomas Francoeur - Moderator, chairperson of biological and allied health sciences, Fairleigh Dickinson University, Madison, New Jersey

Donald R. Raichle, professor, Department of History, Kean College of New Jersey, Union, New Jersey

Wanda Young, associate professor, University of Saskatchewan, Saskatoon, Saskatchewan, Canada

1119

Alternative Futures Through Systems Thinking

Systemic secular thinking traditionally belongs to the powerful; non-systemic, fragmented secular thinking to the weak and romantic. Systemic *religious* thinking is sometimes encouraged by the powerful for the weak, because such thinking is usually

less pragmatic. Thus the division of labor is maintained through secular systemists who control the social institutions. This symposium examines the problem and offers alternatives to it.

Michelle Small - Moderator, Futures Program, University of Minnesota, Minneapolis

Howard Thorsheim, professor of social psychology, St. Olaf College, Northfield, Minnesota

Richard Bergon, PLATO computer-based education programmer, Control Data Corporation, Minneapolis, Minnesota

Magoroh Maruyama, professor, Southern Illinois University, Carbondale, Illinois

1120

Complex Problems and Scarce Resources: A Symposium on Human Services in Communities

Economic fluctuations and other global forces bring considerable shifts in community needs and resources. Traditional ways of providing local services may be disrupted. Presenters will recommend ways of actualizing cooperation among community agencies to cope with scarcity and disruption.

Nancy L. Knapp - Moderator, assistant professor of educational administration, Northern Illinois University, DeKalb, Illinois

Rodney M. Borstad, professor of education, Northern Illinois University, DeKalb, Illinois

Joan Goldstein, assistant professor, Community Nursing, University of Michigan, Ann Arbor

World Food: Will There Be Enough?

"The outcome of the war on hunger . . . will not be determined primarily by forces beyond human control, but rather, by decisions and actions well within the capability of nations working individually and together," concluded the U.S. Presidential Commission on World Hunger in December 1979.

The adequacy of food supplies is influenced by international political forces but can be improved by better management of world food supplies, more food production (especially in the Third World), information on climate, new technology, and coherent national food policies.

Track Organizer:

Keith Wilde, Food Markets Analysis Division, Policy and Economic Branch, Agriculture, Ottawa, Ontario, Canada

1201

Food in the 80s

Rapid population growth and vagaries of weather continue to make food the key problem for the 80s despite continued improvements in the production of food. This session will highlight the key problems for the Third World.

M.S. Swaminatan, secretary, Department of Food and Labor, India

Arturo Tanco, minister of agriculture,

Ministry of Agriculture, Manila, Philippines

1202

World Hunger: A Comprehensive Systems View of Options

An audience interactive approach to world food problems.

Mihajlo D. Mesarovic, co-author, *Mankind at the Turning Point*; director,

Systems Research Center, Case Western Reserve University, Cleveland, Ohio

1203

Will Food Be Fit to Eat?

This session will discuss problems in large food systems: Are they safe? What are the inherent dangers? Discussion will also focus on the quality of food, such as raw versus processed.

A.B. Morrison - Moderator, chief, Health Protection Branch, Health and Welfare, Ottawa, Canada

Joan Gussow, Columbia University, New York, New York

1204

Influence of Culture and Life-style on Nutrition

Based on experiences in countries in the Third World, discusses how culture and understanding of nutrition and life-styles can influence the adequacy of food supplies.

Alistar Grosart - Moderator, senator, Canadian Senate, Ottawa, Canada

Robert A. Schulz, associate professor, Faculty of Management, University of Calgary, Alberta, Canada

1205

Meeting Food Needs Through Climate Defensive Strategy

The development of information sciences provides a better understanding of climatic impact on food. This session will focus on how to manage agriculture by reducing the impact of climate on food supplies.

Lloyd L. Slater - Moderator, forum manager, The Food and Climate Forum, Aspen Institute for Humanistic Studies, Boulder, Colorado

Liberty Mhlanga, director, Environmental Program, Senegal

George S. Atkins, senior agricultural commentator, Canadian Broadcasting Corporation, Toronto, Ontario, Canada

1206

Appropriate Technology for the Third World

Discussion of the Western agricultural technology appropriate for the Third World. Is Canadian agricultural technology appropriate for developing countries?

Clayton Switzer, dean of Agriculture, University of Guelph, Ontario, Canada

1207

Environmental Limits and Opportunities for Food Production in Canada

Environment Canada, the Canadian federal environment department, is about to release reports of extensive research on agricultural systems. An interpretation of the reports' major contributions will be given.

Jacques Gerin - Moderator, senior assistant deputy minister, Environment Canada, Ottawa, Canada

G.S. Hart, Science Policy Staff, Environment Canada, Ottawa, Canada

1208

Waste Exchange for the Destitute

This session will focus on a practical program for transforming excessive household consumption in developed nations into long-term sustenance for the desperately poor of Third-World countries.

Graham Kerr, director of food services, Youth With A Mission; Galloping Gourmet of TV fame.

1209

North-South Dialogue and Issues

Examines the issues which involve the developed northern countries and less developed southern countries.

Lorne Nystrom, member of Parliament (Saskatchewan), House of Commons, Canada

Cary Fowler, food researcher and writer, director of resource center, National Sharecroppers Fund, Wadesboro, North Carolina

1210

Farming Systems of the Future

This session will focus on aquaculture farms as a food system design for a habitat based on renewable resources. It will also examine efficient farms and a homestead

design as part of the total design concept of permaculture.

David Stieglitz - Moderator, architect, Buffalo, New York

William Mollison, Tagan Community, Australia

1211

The Knowledge Component of Capital and Its Effects on World Food Shortage

An effective approach to abating the world food shortage and for raising the quality of life may be to extend the intensive use of capital requiring high skill to worldwide practice. This session will examine how people can accumulate and generate in their own individual cultures the necessary knowledge that makes capital productive and appropriate.

John C. Sanders, owner, Control Consultants, Strongsville, Ohio

1212

The Opportunity of the Commons: Global Solutions to Food Problems

This session will examine the global aspect of food with respect to social, cultural, and ethical issues as well as management and technology. This is one of five sessions on the opportunity of the commons.

Alister Grosart, senator, Canadian Senate, Ottawa, Canada

Russell Gwilliam, IBI Group, Toronto, Ontario, Canada

Arthur Read, Read, Vorhees and Associates, Canada

Habitats: Human Settlements and Their Networks

The kinds of settlements we plan for the future and the networks of transportation and communication which serve them will significantly determine our quality of life. Sessions in the habitats track will discuss a variety of issues concerning settlements in both developed and less developed countries.

Track Organizers:

Jerome Pickard, economic geographer, Appalachian Regional Commission, Washington, D.C.

David Stieglitz, architect, Stieglitz, Stieglitz & Tries, Buffalo, New York

1301

Metropolitanization of the Third World: Golden Opportunity or Prescription for Disaster?

In Latin America, urban population is a much higher proportion of the total than in most of the third world, and enormous "megacities" have already developed, with both rapid rural to urban migration and high rates of natural growth. Future projections produce staggering numbers and indicate future issues related to unprecedented overgrowth of "megacities" and explosive increase in the size of the labor force. Housing the human tide engulfing third-world megacities (which have many

millions of "squatters" or slum dwellers) will be examined economically, sociologically, and from the perspectives of governmental policy and technology.

Robert W. Fox - Moderator, specialist, Social Studies Section, Inter-American Development Bank, Washington, D.C.

Marilyn Brant, urban planner and partner, Thornton Fagan Brant Rancourt, Inc., Pasadena, California

1302

Emerging Third-World Megalopolises: Future Projections for India

India's urban growth is concentrating in several megalopolises: by 2000, several of

these will have populations well over 10 million, with the largest several times that number. Planning for a polynucleated pattern of development in the megalopolitan region surrounding Bombay is described and discussed.

Rashmi Mayur - Moderator, executive director, Urban Development Institute, Bombay, India

J. R. Patwardhan, deputy municipal commissioner (engineering), Municipal Corporation of Greater Bombay, India

V. B. Shirodkar, deputy city engineer, Municipal Corporation of Greater Bombay, India

A. N. Kale, executive engineer (development plan), Municipal Corporation of Greater Bombay, India

1303

Urban Fantasy Structures Today: Reality Tomorrow

Focuses on designers and implementers of human environments, especially on innovative designs.

Roy Mason - Moderator, architect and president, Tricentennial Development Corporation, Washington, D.C.

Bruce McColm, founder, Pachyderm Productions, Ltd., New York, New York; contributing editor and United Nations correspondent, the *National Catholic Register*

Glen Small, architect and planner, teacher, Southern California Institute of Architecture, Santa Monica, California

1304

Recycling Cities: Retrofitting or Retrogression?

Developing self-sustaining neighborhoods is a practical way to involve individuals and organizations in building a "decentralized" and humanely organized future. Adaptive re-use is a total strategy for neighborhood rehabilitation consisting of numerous elements (including upgrading of public services and transportation). City-wide strategy is illustrated by plans and concepts for Washington, D.C., for the year 2000 and into the twenty-first century.

Joe Falk - Moderator, director, The Center for Neighborhood Development, Park College, Kansas City, Missouri

David Listokin, professor and research associate, Center for Urban Policy Research, Rutgers University, New Brunswick, New Jersey

John Fondersmith, chief of downtown section, D.C. Office of Planning and Development, Washington, D.C.

1305

Steady-State Habitat Infrastructure: An Alternative for Planning Future Cities

In order to continue to enjoy a constant high level of living, people must develop

totally self-sufficient cities. This session will focus on the concept of self-sufficient cities and particularly Capricorn, a self-sufficient city designed by the panelists.

David T. Stieglitz - Moderator, architect, co-director, Project Capricorn, Buffalo, New York

Jim Fleckenstein, architect, co-director, Project Capricorn, Rochester Institute of Technology, Rochester, New York

Raymond Smith, chemical engineer, chairman, Titan Research Group and Solarcon Corporation, Brussels, Belgium

1306

Changing Technology and Human Settlements: Past, Present, and Future

Trends in concentration versus dispersion and diffusion of human settlements as related to changing technology in the United States are explored and future projections are discussed. Urban dispersal is presented as a means to physically alter urban habitats and to improve quality of life. Human settlement phenomena are presented from an "ekistics" point of view, dealing with the five basic elements: nature, mankind, society, shells, and networks.

Jerome Pickard - Moderator, senior demographer, Planning and Evaluation, Appalachian Regional Commission, Washington, D.C.

Donn Hopkins, owner and manager of rental cabin community, College, Alaska

Michael E. Davey, principal researcher, Battelle Memorial Institute, Washington, D.C.

1307

Human Settlement Strategies for the Future: Innovation Designs and Concepts

A new town project combines futurist studies with long-term development. The

planned urban environment is a comprehensive response to the need for: (a) conservation of resources, (b) efficient use of energy and technology, (c) a livable urban environment, and (d) a healthful societal structure. The present and future utilization of subterranean space is discussed.

Michael M. Mitchell - Moderator, director of planning, Daniel, Mann, Johnson, and Mendenhall, Los Angeles, California

Douglas M. Moreland, senior urban planner, Daniel, Mann, Johnson, and Mendenhall, Los Angeles, California

Michael L. Richards, chairman, Richards, Roberts and Associates, Hiawatha, Iowa

Lynette Nebergall (Richards), treasurer, Stone City Development Corporation, Hiawatha, Iowa

1308

Housing People in the Future: Technology, Forecasting Demand, and Problems in a Third-World Country (India)

An examination of present housing technology and future housing problems, with a discussion of the constraints affecting some innovative housing techniques. A demographic model is applied to market analysis to forecast housing demand for Canada. The needs for housing in India for the year 2000 deal with the future problems of providing housing for a large population.

Marilyn Brant - Moderator, urban planner and partner, Thornton Fagan Brant Rancourt, Inc., Pasadena, California

Diane J. Macunovich, president, Plan Technics Consultants, Inc., Toronto, Ontario, Canada

S. Maudgal, government of India, New Delhi, India



1309

Community Goals: What Do People Want from Their Habitat?

Emphasis will be placed on how to articulate community goals for the satisfaction of needs and desires which determine the quality of life in the community. The content of goals and the role of habitats in the quality of life will also be discussed.

Wilfred A. Kraegel - Moderator, associate actuary, Northwestern Mutual Life Insurance Co., Milwaukee, Wisconsin
May Maury Harding, director, Center for the Study of Alternative Futures, Southwestern at Memphis, Memphis, Tennessee

George Peter, director, Current Operations, Metropolitan Toronto Planning Department, Toronto, Ontario, Canada

1310

Habitat: No Future Without Action

Habitat was the subject of a very comprehensive and well attended conference in 1976. The frustrating and complex problems associated with providing adequate shelter for mankind were thoroughly discussed and quantified. The conference produced crucial and explicit recommendations setting, in effect, a very clear remedial agenda for the future. However, this has not resulted in any significant action! This opening session argues that since we already understand the problem's configuration and, to a large extent, responsible solutions have been defined, it is essential that primary attention be given to promoting action on behalf of the future now, so that it can be achieved.

Peter Oberlander, director, Centre for Human Settlements; chairman of the "Habitat '76" International Conference in Vancouver, British Columbia, Canada

Mohammad A. Quadeer, director, School of Urban and Regional Planning, Kingston, Ontario, Canada

Blake Hughes, president, International Institute for Architecture; organizer of the 1975 International Design Competition for the Urban Environment of Developing Countries, Hudson, New York

Michael Seelig, architect/city planner, assistant professor, University of British Columbia, Vancouver, British Columbia, Canada; author, *The Architecture of Self-Help Communities*

1311

Social Design Aspects of Space Settlements/Habitats

Living in outer space "cities" is now perceived as inevitable—"mankind's last frontier," the "ultimate habitat," etc. While the large-scale settlements depicted in the popular press are habitats few of us are likely to enjoy, the realization of more limited dwellings that service space manufacturing stations is probable before the turn of the century. Theoretical modeling of the social, physiological, and technical

aspects of/consequences for human life in self-contained, self-sustaining capsules in extremely hostile environments may prove to be conceptually useful to planners of terrestrial habitats confronted with the need to evolve new forms of urban infrastructure.

Hugh Millward, professor of geography, St. Mary's University, Halifax, Nova Scotia, Canada

Stewart Whitney, director, Niagara Research Institute, professor of sociology, Niagara University, co-director, Space Settlement Studies Project, Colden, New York

William MacDaniel, professor, Niagara University, co-director, Space Settlement Studies Project, Youngstown, New York

Elwin Powell, professor of sociology, State University of New York at Buffalo, New York

1312

Economics and Public Policy in Support of Future Habitats

This panel will discuss/evaluate alternative economic and public policy frameworks that will be needed to support future habitats regardless of the technologies employed.

Terry Tadge—Moderator, director of research, The Housing Council, professor of urban anthropology, State University of New York at Buffalo, New York

George Dalton, professor of economics, Northwestern University, Evanston, Indiana

David Bazelon, social critic, scholar/author, *The Paper Economy*, Buffalo, New York

Paul Davidoff, urban planning consultant, New York, New York

Mitchell Harawitz, professor of economics, State University of New York at Buffalo, New York

Linus O' Kere, faculty research associate at Tuskegee Institute, Tuskegee, Alabama

1313

The Future of Urban Revitalization

The combined effect of rapidly increasing population and the 2% annual retirement rate for existing shelter has been to create a global demand for new construction equivalent to one new city of half a million people every day—a building rate which has not, and probably cannot, ever be achieved. The following session examines some of the problems and some of the possible solutions to urban habitat conservation at a global scale.

Robert Morris, vice president, development programs, Control Data Corporation
Sanford Goodkin, real estate development and management consultant, Del Mar, California

Gerald Allan, architect, futurist, and president, Criteria, Inc., Minneapolis, Minnesota

Terry Martin, urban policy planning

consultant, Urban Renewal Agency, Buffalo, New York

J. Timothy Snell, director of Institutional Research for Euerbe, Bloomington, Minnesota

Frances Stieglitz, architect, specialist in the application of Defensible Space, Buffalo, New York

1314

The Future of Non-Urban Habitat in an Urbanizing World

The despoliation of man's non-urban habitat is increasing at an alarming rate, in large part a direct (and indirect) consequence of urbanization but also as a result of overgrazing, poor soil conservation and/or waste disposal practices, and all too frequently, inadequate land management policies. This session will focus on the policy, planning, and developmental issues related to the sparsely populated habitat areas of the globe.

Frederick Buttel, assistant professor of rural sociology, Cornell University, Ithaca, New York

Mark Lapping, assistant director and associate professor, Environmental Program, University of Vermont, Burlington, Vermont

Pierre Clavel, assistant professor, Department of City/Regional Planning, Cornell University, Ithaca, New York

Chuck Matthei, associate of the Institute for Community Economics, expert in the formation of community land trusts, Boston, Massachusetts

Harvey Jacobs, director of the Rural Planning and Research Group, specialist in rural-land use policy planning, Windsor, Vermont

1315

Wrap-Up Session

Gunnar Birkets, architect, energy specialist, Detroit, Michigan

Carol Christensen, appropriate technology specialist, Newark, Delaware

Paolo Soleri, futurist, creator/builder of "Arcosanti," Phoenix, Arizona

1316

North America, 1990: A Microcosm

What changes will there be viewing Cleveland, Ohio, as microcosm of urban North America by 1990. A people project, a general membership, non-professional project to demonstrate that you are a futurist if you think like a futurist and you want to be one.

Hugh J. Sloan III - Moderator, rate manager, Ohio Bell Telephone Company, Cleveland, Ohio

Sue Randall, information specialist, Cuyahoga Community College, Cleveland, Ohio

Lewis Alexander, electrical specialist, CONRAIL, Cleveland, Ohio

Tom Hanson, computer programmer, National City Bank, Cleveland, Ohio

Health and Medicine

This track is designed to examine the future of health and health-care systems in the broadest possible context. Rather than dwelling entirely on the technical aspects of health care, sessions will emphasize the linkages between health and the biosphere, the economy, values and human potential, and technology.

Major sessions will be run as panels to allow the expression of contrasting viewpoints and provide plenty of audience interaction. Health professionals will be able to examine their own institutions and organizations in terms of alternative scenarios, and to discuss health futures methodologies. All conferees will have a chance to learn and practice wellness skills in a workshop setting.

Track Organizers:

Trevor Hancock, public health planner, City of Toronto, Ontario, Canada
Miriam Kelty, health scientist administrator, Human Development, National Institutes of Health, Bethesda, Maryland
Edward Kelty, chief, Planning & Systems, National Institute of Mental Health, Rockville, Maryland

1401

The Impact of Industrialization upon World Health

What has industrialization done to health? The panelists will discuss health costs and benefits in both the developed and developing world, assuming continued increase in industrialization.

Fraser Mustard - Moderator, dean of health and science, McMaster University, Hamilton, Ontario, Canada

James Lee, environmental advisor and director, Office of Environmental and Health Affairs, World Bank, Washington, D.C.

Peter Ruderman, dean of the faculty of administrative studies, Dalhousie University, Halifax, Nova Scotia, Canada

Peter Draper, director, Unit for Study of Health Policy, Guy's Hospital, London, England

Daniel Cappon, professor of environmental studies and psychiatrist, York University, Toronto, Ontario, Canada.

1402

Future Scenarios for the Health-Care System

There are several alternative futures open to us. The panelists will discuss implications for the health-care system of the varying societal scenarios, and how they will affect your organization, profession, or institution. (This session has two parts, held on Monday and Tuesday evenings.)

Clem Bezold - Moderator, director, Institute for Alternative Futures, Washington, D.C.

Peter Goldschmidt, director, Policy Research Institute, Baltimore, Maryland

Ronna Klingenberg, director, Trend Analysis Program, American Council of Life Insurance, Washington, D.C.

Trevor Hancock, public health planner, City of Toronto, Ontario, Canada

Russell Jaffee, director, NOVUS, New Options for a Vital America, Washington, D.C.

Irene Jillson, president, Policy Research Institute, Baltimore, Maryland

1403

Practical Wellness Skills for the 80s: A Workshop

The first part of the session will be a discussion of wellness skills. These self-renewing means of becoming healthy reduce the dependence of individuals on professionals and the system for their state of health. The second part of the session will deal with the question: What are the ethical and moral problems facing health-care workers and society in the coming decades?

Donald Ardell, author of *High Level Wellness*, Mill Valley, California

Eli Bay, Relaxation Response, Toronto, Ontario, Canada

1404

The Many Faces of Mental Health

Mental health and marital relationships will be one subject covered. Another area of discussion will be mental health in industry—the relationship of work, values, and stress. Additionally the session will deal with the possibility that in the future there may be enough to go around, so that everyone might enjoy a fulfilled life, which could undermine the self-esteem of many of today's wealthy and powerful people.

Daniel Cappon - Moderator, psychiatrist and professor of environmental studies, York University, Toronto, Ontario, Canada



Graham Taylor, assistant professor of psychiatry, McGill University, Montreal, Quebec, Canada

William J. Lederer, author of *The Ugly American*, Peacham, Vermont

Roderic Gorney, director, Program on Psychosocial Adaptation in the Future, University of California at Los Angeles, California

Ed Kelty, chief, planning and systems, National Institute of Mental Health, Rockville, Maryland

1405

Personal Responsibility for Health: Body, Mind, and Spirit

Are we moving toward more personal responsibility for health? Many developments in this area will affect our health through the 80s. What are the implications of these developments for individuals and for society?

Donald Ardell, author, *High Level Awareness*, Mill Valley, California

Gene Kieffer, president, Kundalini Research Foundation, New York, New York

Russell Jaffee, director, NOVUS, Washington, D.C.

Roderic Gorney, director, Program on Psychosocial Adaptation and the Future, University of California at Los Angeles, Los Angeles, California

1406

Health Futures Methodology Workshop

How do we predict future developments in the health field? Leaders in the field will describe the "how to" of various methodologies as applied to health and health care.

Gregory Parston, health planner, New York, New York

Clem Bezold, director, Institute for Alternative Futures, Washington, D.C.

Leland Kaiser, director, Division of Health Administration, University of Colorado, Boulder, Colorado

Ronna Klingenberg, director, Trend Analysis Program, American Council on Life Insurance, Washington, D.C.

Edward J. Kelty, chief, planning and systems, National Institute of Mental Health, Rockville, Maryland

Louise Lemieux-Charles, coordinator, Blueprint for Nursing, College of Nurses of Ontario, Toronto, Ontario, Canada

1407

Cybernetic Medicine

What are the likely effects of the computer and communications revolution in health-care delivery?

Felix Kaufmann, president, Science for Business, Ann Arbor, Michigan

Bill Weiss, physician and computer engineer, Toronto, Ontario, Canada

1612

The Future of Music in the 80s

A panel discussion of composers and musicians on futures in the field of music and opera/music theatre, emphasizing new directions and new audiences.

John Peter Lee Roberts, director general, Canadian Music Center, Toronto, Ontario, Canada

1613

The Arts and the Community

A panel discussion of arts councils representatives and artist/facilitators on arts activities based in settings less formal than the concert hall or opera house; topics will include the widening of audiences and the demands placed on arts institutions by the increase in leisure-time available to many people.

Burton Woolf, Metropolitan Cultural Alliance, Boston, Massachusetts



Transformation: Personal and Planetary

We live in a time of profound change. It is possible to view this change positively and creatively. What we do as individuals, groups, organizations, nations makes a difference. We have choices about our future.

In this track, we will explore together the linkages between personal transformation and planetary transformation, look at some emerging images of reality, preview our future capabilities as a species, experience ways we can overcome our separations from ourselves, each other, and our own deeper wisdom, and examine our own personal response-ability.

Our time together will include presentations, large and small group discussion, guided imagery, and informal community-building and networking.

Track Organizers:

Marilyn Saunders, founder and director, Center for Conscious Evolution, Inc., Washington, D.C.

Ruben F.W. Nelson, president, Square One Management, Ltd., Ottawa, Canada

1701

Personal and Planetary Transformation: A Necessary Connection Happening Now

To think in a global context while acting locally represents the challenge and promise for the remainder of the millennium. On this panel we shall discuss the shared premises of all cultures and the process of learning to know ourselves which leads to integrated, evolutionary decision-making.

Willis Harman - Moderator, associate director, Center for the Study of Social Policy, SRI International, Menlo Park, California; president, Institute of Noetic Sciences, San Francisco, California.

Avon Mattison, president, Avon Mattison Marketing and Management Consultants, Larkspur, California.

Abdul Aziz Said, professor, International Relations, American University, Washington, D.C.

Larry Wilson, founder and chairman of the board, Wilson Learning Systems, Inc., Minneapolis, Minnesota.

Ruben F. W. Nelson, president, Square One Management, Ltd., Ottawa, Canada.

1702

A Teilhardian Mass: Liturgy for Evolution

"A liturgy for evolution is collaborative and participatory. It is symbolic of the fact that my action, our action, makes a difference."

Raymond Hock, professor of education and philosophy, Drake University, Des Moines, Iowa

1703

Revisioning Reality: Practical Perspectives and Experiential Techniques

The present era is one in which many traditional images of reality have become suddenly obsolete. How are suitable new images of reality to be found, and how shared? This session will focus both on new images of reality that can influence how these questions are answered and on

specific methods through which individuals and groups can "revision" reality.

O. W. Markley - Moderator, chairperson, Studies of the Future Program; associate professor, Human Sciences, University of Houston at Clear Lake City, Texas

Roy Anderson, vice president, Strategic Planning, for Allstate Insurance Companies, Chicago, Illinois

David Spangler, author and lecturer, Lorian Associates, Milwaukee, Wisconsin

Michael Marien, editor, *Future Survey*, World Future Society, Washington, D.C.

Peter and Trudy Johnson-Lenz, independent computer and communications consultants, Lake Oswego, Oregon

Donald Michael, lecturer; consultant; author, *On Learning to Plan and Planning to Learn*, San Francisco, California

1704

Entering the New Age: Planetary Health and Geopsychic Research

We live in a time of awe-inspiring change and transformation. Many of our basic perceptions and concepts of the very nature of reality and of ourselves are being called into question as a result of both breakthroughs in the sciences and deep personal experiences. Of specific interest is the new age vision of Gaia, the planet Earth hypothesized as a living, conscious being.

Barry McWaters, co-director, Institute for the Study of Conscious Evolution, San Francisco, California

1705

The Future Human: An Exploration into Evolutionary Potential

Is the extra-ordinary becoming the new norm? Expanded consciousness, space development, longevity, super-health, super-learning, artificial intelligence, synergistic social organization. What kind of human being do these potentials lead toward? What is the relationship between personal capacity and species capabilities?

Barbara Marx Hubbard - Moderator, author, *Hunger for Eve*; chairperson, The International Committee for the Future, Washington, D.C.

J. Peter Vajk, author, *Doomsday Has Been Cancelled*; theoretical physicist, Science Applications, Inc., San Francisco, California

Brendon O'Regan, director of research, Institute of Noetic Sciences, San Francisco, California

Jim Bennett, cultural anthropologist and associate of Earthport Project (the first international space port, to be located along the Equator), Santa Barbara, California

1706

A Time of Healing: Personal, Social, Planetary

War, hunger, crime, disease, split families, pessimism. . . It's time for healing. Healing within ourselves, healing of our relationships, healing of the social body, the planet. It's time for coming together, for re-connecting with our higher selves, for realizing our healing potential.

Judith Skutch - Moderator, president, Foundation for Inner Peace, Washington, D.C.

William Whitson, chief, Division of Foreign Affairs and National Defense, Congressional Research Service, Library of Congress, Washington, D.C.

David Zeller, associate director, California Institute of Transpersonal Psychology, Menlo Park, California.

Etel deLoach, lecturer, Instructor of Alternative Healing Therapies, Johns Hopkins University, Baltimore, Maryland

Russell Jaffe, wellness practitioner; research associate of Commonweal, Bolinas, California; assistant professor, Uniformed Services University of Health Sciences, Bethesda, Maryland; NOVUS and the Health Audit, Washington, D.C.

1707

Co-creation: Personal Response-Ability

How can we participate more consciously in the transformation? How can we increase our ability to respond to ourselves, to each other, to the forces of change? How can we align our energies so that we are in tune with the transformational process?

Marilyn Saunders - Moderator, founder and director, Center for Conscious Evolution, Washington, D.C.

Maryjane Dunstan, author, *Worlds in the Making*, Larkspur, California

Belden Paulson, chairman, Center for Urban Community Development, University of Wisconsin, Milwaukee, Wisconsin

William Pilder, co-director, Mainstream Associates, New York, New York

Birgitta Svensson, former owner and developer of the Solgarden Health Center in Sweden, Tiburon, California

Mark Satin, author, *New Age Politics: Healing Self and Society*; staff member of the New World Alliance, a national transformation-oriented political organization, Washington, D.C.

1708

The Aquarian Conspiracy

Will provide popular explanation of revolutionary science. Drawing upon scientific evidence for transformation, the power of networking, and a description of the process of change, this presentation will sketch out the social transformation expected in the 1980s for education, health, and business.

Marilyn Ferguson, author, *The Aquarian Conspiracy*, Los Angeles, California



Management Concerns • Human Concerns

GLOBAL CONCERNS

Resources

The standard of living in the developed countries has depended heavily on the availability of inexpensive natural resources. The 1980s will witness continued shortages of key natural resources, substitutions, and better understanding of renewable resources. This track will examine the capability of governments to assess the availability of natural resources and their plans to respond to changes in availability—as well as the impact on the environment.

2101

Renewable Resources: Future Scenarios and Biological Realities

Examines arguments for decreasing dependence on finite resources and increasing dependence on renewable resources and the increasing importance of resource management.

Larry W. Tombaugh, chairman, Department of Forestry, Michigan State University, East Lansing, Michigan

Robert N. Stone, project leader, Forest Products Laboratory, Madison, Wisconsin, and long-time researcher with U.S. Forest Service

2102

Resources and the Environment

This session will focus on the availability of natural resources and the implications for the environment.

Norman Myers, consultant in environment and development, Nairobi, Kenya

Noel Brown, chief of liaison office, United Nations Environment Programme, New York, New York

Liberty Mhlanga, director of environmental development programs, Senegal

Mushir Ahmed, director of telephone division, India

A. Karim Ahmed, senior staff scientist, Natural Resources Defense Council, Inc., New York, New York

2103

Disappearing Species and Declining Tropical Forests

Discussion of the survival prospects for species, tropical rain forests, and other natural resources.

Norman Myers, consultant in environment and development, Nairobi, Kenya

Robert Allison, Ontario Ministry of Natural Resources, Toronto, Ontario, Canada

Anthony Keith, director, Wildlife Research and Interpretation Branch, Canadian Wildlife Service, Hull, Quebec, Canada

2104

The Global 2000 Report

Presents the results of a three-year report on world trends in population, natural resources, and the environment done by U.S. Executive Branch agencies. Participants and commentators will also discuss the current capabilities of those agencies to conduct long-range global analysis.

Dennis L. Meadows, professor of engineering, Dartmouth College, Hanover, New Hampshire

Gerald O. Barney, consultant to Council on Environmental Quality and Department of State, United States government, Washington, D.C.

2105

The Arctic: Tomorrow's Ocean

This unique 37-minute wide-screen spectacle involves color film, slides, and 15 computer-coordinated projectors, with live narration by Joseph MacInnis and a

discussion period on implications for the future. Chronicles over 10 years of scientific and technical effort of over 75 people from around the world in over 800 dives at 27 different dive sites in the Arctic. These expeditions involved the first manned dives beneath the North Pole, the first manned polar station beneath the Arctic ice, the first satellite transmission from beneath the Arctic Ocean to North America, and the first underwater encounters with bowhead and beluga whales and harp seals.

Joseph B. MacInnis, president and ocean consultant, Undersea Research Limited, Toronto, Ontario, Canada

2106

Regional Resource Information Systems and New Technology

The rapid development of information technologies and the recognition of the need for better information improve the prospects for resource management and preservation of the quality of life. Special emphasis will be placed on remote sensing.

A. K. McQuillan, Canada Centre for Remote Sensing, SURSAT Project Office, Ottawa, Canada

Gary T. Whiteford, associate professor, University of New Brunswick, Fredericton, New Brunswick, Canada

Energy

The rapid economic growth of the 60s and 70s was predicated on an energy supply that was nonrenewable. The scramble to understand alternative sources of energy, especially renewable sources such as the sun, has catapulted energy issues to the forefront of international, national, and local concerns. This track will focus on appropriate energy technology, the relationship between communications technology and energy, the role of conservation, and especially the international implications of energy shortages.

Track Organizers:

James Coomer, associate professor, Studies of the Future, University of Houston at Clear Lake City, Texas

Ken Burkhardt, coordinator, Systems Studies, Ryerson Energy Center, Toronto, Ontario, Canada

2201

Energy: The Current Dilemma

Now that the era of cheap oil is over, mankind needs a new reliable source of energy. The energy options are either clean but lean, or rich but risky. Which is better? The choice is ours. In this session, the world's energy problem will be reflected in the Canadian situation, and a view from developing countries will be presented.

Digby Hunt - Moderator, assistant

deputy minister, international energy, Energy, Mines, and Resources, Ottawa, Canada

Fred Knelman, professor, Science and Human Affairs, Concordia University, Montreal, Quebec, Canada

A. Suryanarayan, director, UN Environment Programme, Thailand

Donald Michael, author, *On Learning to Plan and Planning to Learn*, San Francisco, California

Walter Hahn, senior specialist, Science, Technology, and Futures Research, Congressional Research Service, Library of Congress, Washington, D.C.

2202

Countdown for Fossil Fuels

Renewable energy technology is not forecast to make a significant contribution to our energy requirements until early in the twenty-first century. The fossil fuels (petroleum, natural gas, and coal)—all increasingly expensive finite resources—will have to provide an energy-hungry world until these technologies are in place.

Can our presently known resources carry until that time? What are the global supplies? What local decisions must be made in order to ensure that there is no shortfall of energy in the interim period? What are the economic, political, and environmental criteria for these decisions?

I. Bruce MacOdrum - Moderator, executive coordinator for conventional energy, Ministry of Energy, Ottawa, Canada
Ian R. Smythe, executive director, Canadian Petroleum Association, Calgary, Alberta, Canada

Eric C. Sievwright, energy consultant and president, E.C. Sievwright Associates, Toronto, Ontario, Canada

Alan Holt, director, Fuels Division, Ontario Hydro, Toronto, Ontario, Canada

Joseph Barnea, senior fellow, Futures Program, United Nations Institute for Training and Research, New York, New York

2203

The Future of Nuclear Power

One of the most important issues facing mankind in the 1980s will be discussed in this session: the large-scale peaceful use of terrestrial nuclear power. Is the nuclear resource a globally important solution, or is it a hindrance to opportunities afforded by forgoing the nuclear option?

John Foster - Moderator, chairman, Canadian National Committee, World Energy Conference, Toronto, Ontario, Canada

Norman Aspen, president, Canadian Nuclear Association, Toronto, Ontario, Canada

Gordon Edwards, national chairman, Canadian Coalition for Nuclear Responsibility, Montreal, Quebec, Canada

Irene Cortez, professor, University of Manila, Philippines

2204

Renewable Energy: Horizons to Development

What is the potential of renewable energy resources? What are the barriers to their development? Can the renewables alone support the world population, at present expectations in life-style? What decisions must be made globally and at the local level?

John Neate - Moderator, president, John Neate and Associates, Toronto, Ontario, Canada

Robert Paehlke, associate professor of political studies, Trent University, editor, *Alternatives*, Petersborough, Ontario, Canada

Ian Connerty, councillor, Town of Madoc, Ontario, Canada

2205

Energy and the Conserver Society

Energy conservation requires not only improved technology and computer controls, but also right attitudes and life-style, planning of human habitat, and appropriate social structure. The concept of a conserver society will emerge from this session.

I. H. Rowe - Moderator, executive coordinator, Ministry of Energy, Toronto, Ontario, Canada

Kimion Valaskakis, director, Gamma Group, University of Montreal and McGill University, Montreal, Quebec, Canada

Charles Simon, architect and planner, Charles Simon Architects and Planners, Toronto, Ontario, Canada

2206

Eco-Dynamics

Environmental equilibrium, or steady-state ecology, is determined by the carrying capacity of the land: the Eco-Capacity. Energy is an important parameter in the interaction of man with the environment. (This is a joint session with the Environment and Population tracks.)

Kenneth Hare - Moderator, provost, University of Toronto, Ontario, Canada

2207

The Opportunity of the Commons: Global Solutions to Energy Problems

This session will provide a brief overview to a series of four sessions on the opportunity of the commons. Most of the session will be devoted to a discussion of the global aspects of energy with respect to social, cultural, and ethical issues as well as management, technology, and materials.

P. Cam Mackie, special advisor, Department of Indian and Northern Affairs, Canada

Michael E. Butler, Treasury Board, Canada

Reginald Webb, consultant to the Canadian Departments of Transport and Energy, Mines, and Resources, Toronto, Ontario, Canada

2208

Energy and International Conflict

Energy is a unique resource that cannot be recycled, and that is necessary for opening all other resources. Energy, therefore, is of vital interest to all nations. Will they go to war over energy resources? Energy in itself

is an instrument of warfare, powering weapons and moving armies.

This session is to explore the risk of international conflict over energy resources and the impact of peaceful use of nuclear power on a country's defense.

Peter Mueller - Moderator, manager, International Affairs Analysis, Massey Ferguson, Toronto, Ontario, Canada

Norman Alcock, director, Canadian Peace Research Institute, Toronto, Ontario, Canada

2209

Energy Beyond Physics and Energy Education

World energy and power are related terms, presently assigned a very narrow meaning by physicists. Long before the notion of energy existed, work was human work and power had a political connotation. This session will explore the meaning of work, energy, and power in the mental and spiritual realm and their relation to the physical meaning.

Stan Townsend - Moderator, president, Canadian Institute of Energy, Toronto, Ontario, Canada

Ken Burkhardt, coordinator, Systems Studies, Ryerson Polytechnical Institute, Toronto, Ontario, Canada

Mel Borins, general practitioner, holistic health, Toronto, Ontario, Canada

John Steinbrink, Houston, Texas

Robert Jones, Houston, Texas

2210

Energy and Communications

Will the computer and new electronic communications technology contribute to net energy savings? The potential is there, through new opportunities for better control and through replacing travel and transport by information transfer. However, from this session a warning may come that improved communications could whet the appetite for increased travel and energy consumption.

A. M. Gifford - Moderator, vice president, Ryerson Polytechnical Institute, Toronto, Ontario, Canada

P. Meincke, president, University of Prince Edward Island, Charlottetown, Prince Edward Island, Canada

Phillip Lapp, president, Lapp Limited, Consulting Engineers, Toronto, Ontario, Canada

2211

Energy Conservation: Community Commitment Through Community Involvement

Discussion of a major demonstration project for the Canadian government consisting mainly of a one-year community involvement process that establishes target areas for energy conservation; goals and objectives; strategies; and an action plan for community-based energy conservation. The plan moves through five stages: (1)

animation, (2) awareness, (3) collaboration, (4) integration, and (5) consensus. Evaluation of the project extends over one additional year.

Lou J. D'Amore, president, Canadian Futures Society; president, L.J. D'Amore and Associates, Ltd., Montreal, Quebec, Canada

Lorna Seaman, secretary, Canadian Futures Society, Toronto, Ontario, Canada

Phil Esmonde, consultant, L.J. D'Amore and Associates, Ltd., Montreal, Quebec, Canada

Catherine Hunt, consultant, L.J. D'Amore and Associates, Ltd., Montreal, Quebec, Canada

2212

Future Prospects of High-Energy Technology

What potential is there in new technology solving our pressing energy needs? In 1936, Rutherford warned that everyone was a fool who believed that the newly discovered nuclear energies could ever be used for a practical purpose. This session is devoted to "high technology" solutions to energy problems.

Ted Wiz - Moderator, dean of technology, Ryerson Polytechnical Institute, Toronto, Ontario, Canada

Stan Townsend, president, Canadian Institute of Energy, Toronto, Ontario, Canada

Charles Bloomquist, project director for societal assessment of Solar Power Satellite Project, PRC Systems Services Corporation, Toronto, Ontario, Canada

Joseph Barnea, senior fellow, Futures Program, United Nations Institute for Training and Research, New York, New York

2213

Values for Energy Decisions

A view of the importance and urgency of the energy problem today is desirable to clarify the value of various energy options. In this session, the emphasis is on ethical and moral aspects of energy planning.

Tillo E. Kuhn - Moderator, professor, York University, Toronto, Ontario, Canada

Graham Tucker, chaplain, King-Bay Chaplaincy, Toronto, Ontario, Canada

Laszlo Bodnar, economist, Ministry of Treasury and Economics, Toronto, Ontario, Canada

2214

Appropriate Energy Technology

Appropriate energy decisions should balance development and utilization of fairly accessible resources within the context of just needs. Perspectives will be offered on successful action at the community and regional levels. These will be synthesized for benefit of international development.

Nicholas Teekman - Moderator, vice president, Dynamo Genesis, Inc., Toronto, Ontario, Canada

F. C. Hooper, professor, University of Toronto, Ontario, Canada

Malcolm Lodge, manager, WECS development, Institute of Man and Resources, Charlottetown, Prince Edward Island, Canada

William Mollison, lecturer, Permaculture Association of Australia, Stanley, Australia

D. A. Henry, president, Canadian Energy Development Systems International, Ottawa, Canada

2215

Priorities in Energy Planning for Industrialized Countries

Energy systems such as houses and human settlements designed now will be in use 50 or even 100 years from now. Energy education for designers and planners is therefore extremely important. This session is scheduled to bring out and exchange the experience of planners in industrialized nations.

W. W. Stevenson - Moderator, executive coordinator, Strategic Planning and Analysis, Ontario Ministry of Energy, Toronto, Ontario, Canada

K. W. Foley, president, Urban Transportation Development Corporation, Ltd., Kingston, Ontario, Canada

David Nitkin, senior land use planner, Ontario Ministry of Transportation and Communications, Toronto, Ontario, Canada

Michael Waterhouse, professor of environmental studies, University of Waterloo, Ontario, Canada

Meir Carasso, manager, Energy Systems Modelling Project, California Energy Commission, Sacramento, California

2216

Energy Planning for Developing Countries

Energy planners in developing countries can learn from the mistakes that have been made by industrialized nations. Planning and even pre-planning energy systems helps to avoid mismatch of resource to use and the fouling up of the environment by energy wastes. This session will offer an

opportunity to exchange ideas for energy planning.

Roger Schwass - Moderator, dean, Environmental Studies, York University, Toronto, Ontario, Canada

Frederick Schwartz, environmental consultant, Oakville, Ontario, Canada

Rashmi Mayur, executive director, Urban Development Institute, Bombay, India

2217

Summary Session for the Energy Track

The purpose of this session is to give a summary of all Energy Track sessions, and to draw some guidelines from the experience of the First Global Conference on the Future for the betterment of the world energy system.

Ken Burkhardt - Moderator, coordinator, Systems Studies, Ryerson Polytechnical Institute, Toronto, Ontario, Canada (All moderators of energy sessions and rapporteurs will summarize and draw conclusions.)

2218

Clean Energy in the 1980s: A Sober Analysis

Despite recent technological alternative energy developments, the planet does not appear to be benefiting from these developments due to slow or non-commercialization. This is analyzed from a political, social, economic, and cultural perspective.

Andrew Michrowski - Moderator, president, Planetary Association for Clean Energy, Inc., Ottawa, Canada

Adam Kaprinsky, evaluation analyst, Optimum Alternative Energy Systems, Hydro Quebec, Human Ecology Division

Ted Klich, management consultant, Cooper and Lybrand

Norman Ruebens, nuclear researcher, Energy Probe, Inc., author, *What Keeps Us from Freezing in the Dark?*

Lawrence Solomon, conservator advocate, author, *Conservation Solution*

Richard Quittenton, engineer, energy consultant, Toronto, Ontario, Canada



Today's Frontiers: Space, Oceans, and Polar Regions

Exploring the unknown in outer space, under the oceans, and at the frozen poles of the earth will dramatically affect everyone's future. These sessions will show the critical role of new frontiers, how the space shuttle will reshape industry, space migration as the next large step, the role of the military in space, how personality may change in the high frontier, speculations on the next billion years, astronomy updates, how we could return to the oceans, carbon dioxide build-ups melting the polar ice, why Krill may have a big future, and what goals for space should be adopted now.

Track Organizer:

Jerome Glenn, director, Future Options Room, Bethesda, Maryland

2301

Frontiers of the Future

This session will sketch out the nature and roles of perceived physical frontiers for society. It will emphasize security and opportunity as timeless issues.

Jerome C. Glenn - Moderator, author and director, Future Options Room, Bethesda, Maryland

Herman Kahn, author and director, Hudson Institute, Croton-on-Hudson, New York

Timothy Leary, author and philosopher, Los Angeles, California

Role of the Space Shuttle in Human Development

Discussion of the space shuttle's design, role, and implications by the National Aeronautics and Space Administration official most directly responsible for its development. (This session will immediately follow the "Frontiers of the Future" session.)

Jerome C. Glenn - Moderator, author and director, Future Options Room, Bethesda, Maryland

John Yardley, associate administrator for Space Transportation Systems, National Aeronautics and Space Administration, Washington, D.C.

2302

Space: The Natural Frontier

Because space is a new frontier, most social planners have not explained its importance. Many consider it irrelevant or wasteful. Such pre-Copernicanism could seriously handicap the human race, preventing us from gaining a foothold in the infinite in time to conserve the remaining resources on earth, serve the needs of people especially in the developing world, and provide an open future for coming generations.

Barbara Marx Hubbard - Moderator, director, The International Committee for the Future, Washington, D.C.

J. Peter Vajk, author and theoretical physicist, Science Applications, Inc., Pleasanton, California

Robert L. Staehle, aerospace engineer and president, World Space Foundation, South Pasadena, California

Carol S. Rosin, consultant to International Association of Educators for World Peace, Washington, D.C.

2303

Role of Military in Space: Past, Present, and Possible Futures

Review of Soviet and American military space programs, demilitarization efforts such as the UN Moon Treaty, Soviet and American views of space as seen through the literature and poetry.

James Oberg - Moderator, consultant, National Aeronautics and Space Administration, Houston, Texas

Helen Knox, poet, Oakland, California

2304

From Earthkind to Spacekind: Issues in Habitat Design, Culture, and Psychology

What habitat designs affect the mind in what ways? Discussion of different concepts of architectural space, heterogenistic design principles, outside-in landscaping, and matching between mindscapes and habitat design. Evolution of consciousness on earth and orbital space with implications for views of reality will be shared, especially concentrating within the next 15-20 years.

Stan Rosen - Moderator, author and chief of Spacecraft Systems, Defense Satellite Communications Systems, U.S. Air Force, Los Angeles, California

Magoroh Maruyama, author and professor, Department of Administrative Sciences, Southern Illinois University, Carbondale, Illinois

James Beal, non-destructive testing engineer, Martin Marietta Corporation, presently on loan to National Bureau of Standards, Washington, D.C.

2305

The Next Billion Years

This mind-stretching session will explore the long-range physical and biological crises we face, why we must move, who we can expect to encounter, what is anthropophysics, can matter mind, what we must

learn about our solar system and galaxy, and how we can learn it.

Jerome C. Glenn - Moderator, author and director, Future Options Room, Bethesda, Maryland

Gregg Edwards, program manager, Knowledge for National Productivity, National Science Foundation, Washington, D.C.

Richard Hoagland, science journalist, *Star and Sky*

2306

Oceans: Current Research, Future Visions, and Geopolitical Realities

Find out what current research has uncovered concerning the potential for animal, vegetable, and mineral harvests at sea. Visions of human habitation and commerce will be discussed along with such factors as the geopolitical realities and intentions of nations such as the Soviet Union.

Robert Shleser - Moderator, director, The Oceanic Institute

John Thomas, director, Science and Technology Studies, and Soviet specialist, National Foreign Assessment Center, U.S. Central Intelligence Agency

Kym Murphy, director, Ocean Studies, Experimental Prototype Community of Tomorrow, Disney World, Florida

2307

Promise of and Warnings from the Polar Regions

Alternative scenarios of carbon dioxide build-up and polar ice melting, international cooperation among scientists, energy and food resources of Krill and other deposits are key issues of earth's polar regions. How could they influence our future?

Richard Cameron, program manager, Division of Polar Programs, National Science Foundation, Washington, D.C.

2308

Long-Range Space Goals: The Economic, Design, and Social Realities

Given the current political/economic realities, what space goals are reasonable? What is already planned? Who's got what space shuttle payloads for what purpose? Should the solar satellite be the centerpiece of the mid-term space goals? What are the National Aeronautics and Space Administration's plans?

Konrad K. Dannenberg - Moderator, retired National Aeronautics and Space Administration and Peenemunde rocket scientist, Space and Rocket Center, Huntsville, Alabama

Jim Murphy, director, Administrative and Program Support Directorate, National Aeronautics and Space Administration, Huntsville, Alabama

Gerald W. Driggers, president, L-5 Society, Huntsville, Alabama

Donald E. Tarter, associate professor, Department of Sociology, University of Alabama, Huntsville, Alabama.

2309

Space Industrialization

Up-dates and alternative futures of space

industrialization research, solar satellite cost/benefit studies and comparison with other energy resources, and social/economic/political implications of such new directions.

T. Stephen Cheston - Moderator, associate dean, Graduate School, Georgetown University, Washington, D.C.

Brian O'Leary, author, consultant, and former astronaut, Massachusetts

Frederick Koomanoff, director, Solar Power Satellite Systems, U.S. Department of Energy, Washington, D.C.

Charles Chafer, director of communications, Public Affairs Council, Washington, D.C.

Science and Technology

Human conquest of earth and space has relied on science and technology. Just as technology continues to surge ahead, new questions have surfaced as to emphasis in research and development and the social and economic trade-offs.

This track will examine the global futures spanned by science, the new scientific world view, appropriate technology, as well as the use of science in the study of the future.

Attention will be given to social aspects by examining the social impacts of technology, whether scientists should take a moral stand, roles of women, and the conquest of aging. Otherwise, there will be special sessions on weather modifications, promises of molecular biology, robotic futures, and science, technology, and the corporation.

Track Organizers:

Earl Joseph, staff futurist, Sperry Univac, director, Minnesota Futurists, St. Paul, Minnesota

Gary Sycalik, president, City Foursquare Foundation, Inc., Washington, D.C.

2401

Macroengineering Projects

Macroengineering projects are the largest projects that society attempts. This session starts with a description of the characteristics of macroengineering projects and outlines a number of projects being studied worldwide for initiation in the next decades. The GRAND Canal Water Resources concept for North America is highlighted to illustrate the magnitude of the planning effort for macroengineering projects.

Frank Davidson - Moderator, chairman of the System Dynamics Steering Committee, Alfred P. Sloan School of Management, Massachusetts Institute of Technology, and program coordinator, Macro-Engineering Research Group, School of Engineering, MIT, Cambridge, Massachusetts

Thomas Kierans, director of the Alexander Graham Bell Institute, College of Cape Breton, Nova Scotia, Canada

2402

Technology and Social Change: Cause and Effect

Does society dictate the type of technology/applied science, or does invention and technology dictate change within society? Where's the handle? Does it exist? Do planners and government leaders understand the relationships, and what is the impact to our society if they do not? Where does the responsibility lie to understand and control this catalyst of change?

Gary Sycalik - Moderator, president, City Foursquare Foundation, Inc., Washington, D.C., editor, *Technology Tomorrow*

Emmanuel G. Mesthene, professor of philosophy, Rutgers University, New Brunswick, New Jersey

Victor C. Ferkiss, professor of government, Georgetown University, Washington, D.C.

G. Harry Stopp, Jr., director, Citizens Applied Research Institute, George Mason University, Fairfax, Virginia

Yujiro Hayashi, vice chairman, Institute for Future Technology, Tokyo, Japan

2403

Appropriate Science and Technology for the Third World

Most of the science and technology is produced in the developed countries, which historically have not shown adequate sensitivity to the conditions and needs of the Third World. This session will discuss science and technology with respect to its appropriateness in the Third World.

T. Kayumbo, National Scientific Research Council, Thailand

Abdoul Salam, Pakistan

Henrique Martin Delcampo, Mexico

Rashmi Mayur, director, Urban Development Institute, Bombay, India

2404

Technology: How to "Handle" It

Technology is a very misused and misunderstood word and must be clarified if we are to communicate. This can be done with a simple matrix. Since technology is one of the great driving forces of change in America, and will probably remain so for some time, teachers and the public need some ideas on how to "handle" the concept and examples associated with the term.

Penny Damlo - Moderator, director, Educational Services, Future Systems, Minneapolis, Minnesota

Lee Smalley, professor, Industrial Teacher Education Department, University of Wisconsin, Stout, Wisconsin

2405

Technology: Fire in a Dark World

Based on the book *Technology: Fire in a Dark World*. The pace of United States technological innovation is slowing. This poses serious economic and non-economic consequences. Man's know-how and spirit of inquiry have made him a partner in his own evolution. This presentation will discuss the issues of growth, planetary peril, inhumane systems, employment, risk, and mechanisms for communicating facts and values.

Scott Erickson - Moderator, president, Future Systems, Minneapolis, Minnesota

Perry Pascarella, executive editor of *Industry Week*, Cleveland, Ohio

2406

Science Futures: Future Jobs and Social Roles

As science advances it allows society to do old jobs more efficiently and to do things that were impossible in the past. In the first case, people are displaced from jobs and in the latter case, new jobs are created. The result, in either case, for the long run is that the infrastructure of society is altered. This session will take a psychedelic trip to the next decades of possible new jobs and job displacements spawned by science advancements and investigate future social roles.

Murray Turoff - Moderator, director of the Center for Computer Conferencing, New Jersey Institute of Technology, Newark, New Jersey

Arthur Harkins, professor, University of Minnesota, Minneapolis

Earl C. Joseph, staff futurist, Sperry Univac, St. Paul, Minnesota

2407

Prospective and Retrospective Technology Assessment

The chemical industry—and indeed the chemical profession—is currently the focus of much concern and even alarm for substantial segments of the American public and for many persons in other countries also. This session will discuss the causes of this concern and the opportuni-

ties that exist to improve and control the situation—highlighting public concern with science and science policy.

Edward Lawless - Moderator, head, Technology Assessment Section of the Midwest Research Institute, Kansas City, Missouri

Ralph Wilkinson, senior technology scientist, Midwest Research Institute, Kansas City, Missouri

2408

The Impact of Emerging Technologies

This panel will discuss several emerging technologies, including polarization wave phenomena, remote electronic behavior control, energy transfer, and novel information transmission modalities. A brief introduction to the technologies will be followed by discussion of the impact they may have on individuals and societies in the 1980s.

Eldon Byrd - Moderator, analyst, physical scientist, Naval Surface Weapons Center, White Oak, Maryland

Roy Curtin, director of Advanced Systems, Eyring Research Institute

David Faust, systems engineer, Drexel Institute of Technology, Philadelphia, Pennsylvania

Joseph Jahoda, president, Bayshore Systems, Springfield, Virginia

Robert Cantor, psychiatrist, Ministry of Community Services, Ontario, Canada

2409

Appropriate Technology

This session gives a number of definitions for appropriate technology. It discusses Schumacher's ideas as they do or do not apply to the world from a variety of viewpoints, including appropriate roles for women. Additionally, the necessity and utility of appropriate technology for the United States is addressed; however, global issues as they relate to the developing countries are stressed.

T. Lance Holthusen - Moderator, consultant, T.L.H. Associates, St. Paul, Minnesota

Linda Armstrong, graduate student, University of Minnesota, Minneapolis

Carol Christensen, president, Christensen Associates, Newark, Delaware

2410

Robotic Futures

This two-part session consists of a review of highlights from the 1980 "Robotic-Futures" Conference, held at Long Island University. In the second half of the workshop, attendees will participate in simulation gaming and interaction with a "robot" form to generate positive, up-side robotic futures.

Brian K. Toren, staff engineer, Sperry Univac, St. Paul, Minnesota

Leigh F. Wright, adjunct faculty, Long Island University, New York

Moshe Davidowitz, European coordi-

nator, Association for Humanistic Psychology, Geneva, Switzerland

William Gevarter, manager of automation, Electronics and Human Factors, National Aeronautics and Space Administration, Washington, D.C.

2411

Future Concepts of Space, Time, and Image

An integrative "workshop" in the form of a special panel with audience participation. This is to be an interactive session for experts as well as generalists, theoreticians as well as practitioners.

Erik Solem - Moderator, scientist, Directorate of Strategic Analysis, Operational Research and Analysis Establishment, Department of National Defence, Ottawa, Canada

Paris Arnapoulos, professor, Concordia University, Montreal, Quebec, Canada

Joe Halina, director, Canadian Television Research Institute, Ottawa, Canada

Clive Simmonds, policy analyst, National Research Council of Canada, Ottawa, Canada

Gordon Thompson, communications engineer, Bell Northern Research, Ottawa, Canada

G. D. Kaye, Operational Research and Analysis Establishment, Department of National Defence, Ottawa, Canada

2412

The Corporation As a Vehicle of Change: Innovation—Meet the Enemy

Discusses the realities of translating science and technological innovations, at major corporations, into developing opportunities which can measurably impact the future. Panelists will report on their considerable experience with innovation programs, technology assessments, and research on causes of success and/or failure among technology projects. Included are translating promising new ideas from research into new business ventures. Additionally, the "four hurdles of acceptance" are also discussed.

John W. Muncaster - Moderator, director of Venture Development, Owens-Corning Fiberglass Corporation, Granville, Ohio

William Souder, professor and director, Technology Management Studies Group, University of Pittsburgh, Pittsburgh, Pennsylvania

2413

The Fourth Kingdom—Technology As the Seed Imperative

Lecture/slide presentation discussing the fourth kingdom (the fruits of the human mind, among which is technology). Technology will enable man to free himself from the earth's fragile ecosystem by developing interstellar arks for seeding the universe with life. The lecture combines the pragmatism of an engineer with the imagination of a futurist philosopher.

William J. Sauber, product manager, Corporate Product Department, Dow Chemical Company, Midland, Michigan

2415

Appropriate Technology by and for Communities

Appropriate technology is important for towns and cities not just in view of what it accomplishes to get work done in an appropriate way, but in view of the human community that is built as people work together, becoming involved in projects they can understand and manage.

Dennis Livingston - Moderator, policy analyst, State Executive Office of Communities and Development, Boston, Massachusetts

Tom Pelletier, public information specialist, National Center for Appropriate Technology, Butte, Montana

William Ellis, director, TRANET, Rangeley, Maine

Valerie Carleton, New Life Enterprises, Providence, Rhode Island

William Becker, assistant director, Wisconsin Energy Extension Service, Madison, Wisconsin

Information and Telecommunications

The information and telecommunications track will deal with key topics at the vortex of many of the changes taking place in our global society. The ramifications of new technologies are just beginning to appear in our daily lives, in corporate and government structures, and in the balance of world power. Sessions are planned that deal with interdisciplinary aspects of new technologies but also to a large extent with how people are using the innovations and in turn how people are being changed by these new technologies.

Track Organizer:

Hollis Vail, management consultant, U.S. Department of Interior, Washington, D.C.

2501

Formal and Informal Global Networks: The Pros and Cons

This essential ingredient in the global communications revolution opens vast ho-

rizons for information dissemination and world-spanning solutions to problems but also alters the parameters of human contact. Will the phrase "terminally ill" take on a new significance? Is information over-

load a positive human experience? Positive action now can help avoid the pitfalls.

Yoneji Masuda, president, Institute for Information Society, Tokyo, Japan

Gordon Thompson, director of communications studies, Bell Northern Research, Ottawa, Canada

Ramesh Verma, director of communications, ACC, Bombay, India

2502

Communications and the Shift in World Power/The Evolution of a Non-American Video Culture

Access to information can enlighten or contain, particularly when accepted without question. Cultural dominance justified by economics of scale is breaking down as the epicenter of video culture bogs down and dispersed production centers spring up.

Ramesh Verma, director of communications, ACC, Bombay, India

Yoneji Masuda, president, Institute for Information Society, Tokyo, Japan

Jayant Shah, computer scientist, India

Zavis Zeman, director, Institute for Research on Public Policy, Montreal, Quebec, Canada

M. N. Sharif, professor and director, Regional Computer Center, Asian Institute of Technology, Bangkok, Thailand

2503

Information Resource Management: Inherently Different or Just Another Library?

What are the ramifications of "expanded memory" in the office, the home, schools, medicine, law enforcement, and creative endeavor? What society can accomplish with new capacity and availability of access to data and information will be decided by individuals now and in the future.

Jayant Shah, computer scientist, India

2504

Personal Computers and the Future: Myths and Realities

Examines on a broad basis the impact of small computers on education and the quality of life. Impacts on institutional education and on self-learning will be explored.

David H. Ahl, publisher, *Creative Computing*, Morristown, New Jersey

Robert McLean, researcher, Ontario Institute for Studies in Education, Toronto, Ontario, Canada

Theodor Nelson, editor, *Creative Computing*, author of *Computer Lib* and *Dream Machines*, Swarthmore, Pennsylvania

Karl Zinn, professor, director of the Center for Research on Learning and Teaching, University of Michigan, Ann Arbor

2505

Conferencing

The process of inter-active communicating

and information exchange through the media of conferences and seminars will be examined and discussed. The power of conferencing as a change agent, particularly through the interaction of participants, will be featured. Computer conferencing will be described and its impacts explored.

Fred G. Thompson, consultant, DPA Consulting Ltd., Ottawa, Canada; past president of Canadian Futures Society

Ann Galley, consultant, Ann Galley Conferencing, Toronto, Ontario, Canada

2506

Telecommunications, Computers, and the Office

Exploration of the organizational and systems possibilities for the office as telecommunications and computers impact on the office

Robert Landau, director, Micronet, The Paperless Office, Washington, D.C.

N. Dean Meyer, director, The Diebold Group, New York, New York

K. M. Speter, manager, Market Planning, U. S. Telephone and Telegraph Corporation, New York, New York

Ivek Vinski, manager, Peat Marwick and Partners, Montreal, Quebec, Canada

2507

Computer Support for "Collective Wisdom"

Speakers will review the innovative use of computer-based communication-information systems designed to collect and amplify the wisdom of individuals to solve common problems. This session will include a large-screen demonstration as well as presentations.

Starr Roxanne Hiltz, associate director of the Computerized Conferencing and Communications Center, New Jersey Institute of Technology, Newark, New Jersey

Murray Turoff, director, Computerized Conferencing and Communications Center, New Jersey Institute of Technology, Newark, and co-author with Hiltz of *The Network Nation*

Julian Scher, associate professor of computer science, New Jersey Institute of Technology, Newark

Harry Stevens, president, Participation Systems, Inc., Winchester, Massachusetts

Robert Johansen, senior research fellow, Institute for the Future, Menlo Park, California

Peter and Trudy Johnson-Lenz, independent consultants, Lake Oswego, Oregon

Lucien Gerardin, research director, Thomson-CSF Corporate Management, Paris, France

Robert Theobald, generalist, communications consultant, author of *Futures Conditional*, publisher, Wickenburg, Arizona

2508

Information As a Public or Private Commodity

The marketplace will be irreversibly altered by the transfer of information and data as an economic "good." Various aspects will be considered. What are the legal, moral, and social ramifications? Will you be prepared?

Zavis Zeman, director, Institute for Research on Public Policy, Montreal, Quebec, Canada

Gordon B. Thompson, director of communications studies, Bell Northern Research, Ottawa, Canada

2509

Can Chip Technology Solve Third-World Socio-Economic Problems?

How appropriate is computer technology in the midst of massive unemployment and shortages? Various experts discuss, question, and speculate on how problems affecting over three billion people can be ameliorated by essentially Western technology.

Ramesh Verma, director of communications, ACC, Bombay, India

Yoneji Masuda, president, Institute for Information Society, Tokyo, Japan

Jayant Shah, computer scientist, India

Robert Russell, Institute for Research on Public Policy, Montreal, Quebec, Canada

Zavis Zeman, director, Institute for Research on Public Policy, Montreal, Quebec, Canada

M. N. Sharif, professor and director, Regional Computer Center, Asian Institute of Technology, Bangkok, Thailand

2510

From Conference Tables to Dinner Tables: The Need to Develop Multisensory Communications

This session will explore the communications potential inherent in multisensory areas such as smell, taste, touch, pre-natal memory, and time-space perception.

Mal Johnson, director, Community Affairs, and senior correspondent, Cox Broadcasting Corporation, Atlanta, Georgia

Harris Dillon, student, Georgetown Day High School, Washington, D. C.

Marcia Boddie Cummings, Renaissance-woman poet, Baltimore, Maryland

Simone Swan, U.S. director, Hassan Fathy International Institute of Appropriate Technology (Egypt); president, Withers-Swan, cultural consultation firm, New York, New York

2511

Socio-Economic Effects of the Technologically-Based Fragmentation of the North American Video Market

The technical impact on how we view ourselves and as others see us is being altered

Population

This track will examine the dimensions and impact of the global population crisis and set forth basic elements of the worldwide action needed during the 1980s to slow growth where it hinders economic and social development, leads to reduced quality of life, and encourages conditions of political-social instability.

The problem is not simply one of numbers, but of time as well. The earth is having to accommodate an additional billion people every 10 years. Projections to the mid-twenty-first century indicate a global population of 12 billion or higher. But intensified efforts to control population growth could hold this increase down to a stabilized level everywhere by the year 2000.

Track Organizers:

Frank H. Oram, executive director, World Population Society, Washington, D.C.

Christopher Taylor, demographic policy consultant, University of Toronto, Ontario, Canada

2701

Future Effects of Population Growth

An examination of the future impact of population growth on food, resources, ecology, education, housing, and health—featuring a unique computer analysis, called RAPID, and presentation of alternate scenarios under varying population pressures.

Rafael Salas (Philippines) – **Moderator**, executive director, United Nations Fund for Population Activities, New York, New York

J.P. Bhattacharjee, director, Policy Analysis Division, Food and Agriculture Organization, Rome, Italy

Philander P. Claxton, Jr., president, World Population Society, Washington, D.C.

Dennis L. Meadows, director, Resource Policy Center, Dartmouth College, Hanover, New Hampshire

Lester R. Brown, president, Worldwatch Institute, Washington, D.C.

John Stover, senior analyst, Futures Group, Glastonbury, Connecticut

2702

Internal Mobility, International Migration, and Growth of Cities

Population pressures cause rural-to-urban migration, phenomenal growth of cities (and slums), migration across borders to find work. Cities over a million will soon

be counted in the hundreds. Mexico City is projected to reach 32,000,000 in twenty years.

Leon Tabah (France) – **Moderator**, director, Population Division, United Nations Secretariat, New York, New York

2703

Population Futures of Industrialized Countries: Aging and ZPG

Increasingly, the industrialized countries are reaching stabilized population levels. Their population profiles and evolving economic-social needs differ greatly from past patterns of growth and expansion.

Charles Westoff – **Moderator**, director, Office of Population Research, Princeton University, Princeton, New Jersey

Jeanne Binstock, director, Consumer and Management Trends, Inc., Ottawa, Canada

Christopher Taylor, demographic policy consultant, University of Toronto, Ontario, Canada

2704

Reproduction Research and Contraceptives for the Future

An examination of current research—with special attention to areas where major breakthroughs are possible in the coming years—and necessary research priorities for the 1980s.

Sheldon Segal, vice president, Rockefeller Foundation, New York, New York

Malcolm Potts (United Kingdom), executive director, International Fertility Program, Research Triangle, North Carolina

2705

Shaping Development to Slow Population Growth

Economic development, planned with proper attention to population factors, leads to reduction of population growth rates, easing the pressures from masses of young unemployed and rural-to-city migrants.

George Zeidenstein – **Moderator**, president, Population Council, New York, New York

Aziz Bindary, executive director, Supreme Council on Population, Cairo, Egypt

Ieda Siqueira Wiarda, professor, Department of Political Science, University of Massachusetts, Amherst, Massachusetts

2706

Population Growth Control Programs: China, India, Indonesia, Mexico, Korea

Case histories of population programs and results in five countries of nearly two billion people, differing widely in race, religion, cultural values, and economic potential: China (1,000,000,000), India (674,000,000), Indonesia (144,000,000), Mexico (70,000,000), Korea (38,000,000).

Nafis Sadik (Pakistan) – **Moderator**, assistant executive secretary, United Nations Fund for Population Activities, New York, New York

P. Chao Chen, professor of political science, Wayne State University, Detroit, Michigan

Jorge Martinez Manautou, executive director, Coordination of the National Family Planning Program, Mexico City, Mexico

2707

Population, Human Rights, and Political Stability

Population pressures and resource depletion have very negative effects on the exercise and preservation of human rights, including conditions which lead to political instability, civil strife, and international conflict. Arousing a mob is very easy in countries (Iran, El Salvador) where unemployment is chronically high and more than half the population is under 25.

Nazli Choucri, professor of political science, Massachusetts Institute of Technology, Boston, Massachusetts

Marshall Green, former Coordinator of Population Affairs, Department of State, Washington, D.C.

Philip Wogaman, dean, Wesley Seminary, Washington, D.C.



Human Concerns • Global Concerns

MANAGEMENT CONCERNS

Social and Institutional Change: Hope or Despair?

This track seeks to develop a dynamic interplay between the extremes of views that have been widely expressed (and are being explored separately in other parts of this conference) about both the "falling apart" of different cultures and societies and the enhancing evolution that may be taking place. It seeks to give free play to a variety of patterns of value-exchanges, presentation styles, synergies, and synchronicities—and not merely to identify differences, but to uncover a direction, an unwritten, unwritable blueprint for the building of a global culture.

Track Organizer:

Dick Wakefield, plans and process analyst, National Institute of Mental Health, Bethesda, Maryland

3101

Keynotes to Social and Institutional Change: Hope or Despair?

This session will deal with personal change as the foundation for social change, the need for democratic management in business, and the need for a new global humanism—and will attempt to point to a middle way between hope and despair.

Dick Wakefield - Moderator, plans and process analyst, National Institute of Mental Health, Bethesda, Maryland

Robert A. Smith, III, freelance writer, occasional consultant and former resources control coordinator, National Aeronautics and Space Administration, Huntsville, Alabama

Irv Thomas, publisher of *Black Bart* newsletter, Canyon, California

David Olsen, founder, New School for Democratic Management, San Francisco, California

Michael Rossman, social critic and educator, Berkeley, California

3102

Nuclear Power and Disarmament

Discussion will center around nuclear power, the possibility of social "fallout" that may result, and citizen expectations concerning nuclear choices. The group will also explore the linking of disarmament or peace dividends with the technique to pay for it.

Walt Morgan, Kirkwood, Missouri

Mason Rumney, Lt. Colonel emeritus, First Steps Foundation, Arlington, Virginia

Robert Jungk, writer and professor of planning sciences, Salzburg, Austria

3103

Nature Consciousness As a Point of Departure Toward Social Change

Personal reality exists at the interface of

Nature and individual consciousness. Nature's part in this interaction has been submerged, to our detriment, beneath an overlay of technology. This session will explore some present efforts to re-sensitize ourselves to Nature's subtle influence on our reality, and will consider how such an awareness contributes to social and institutional change and to our ability to implement such change.

Irv Thomas - Moderator, publisher of *Black Bart* newsletter, Canyon, California

Barry McWaters, co-director, Institute for the Study of Evolution, San Francisco, California

3104

Scientific Impetus to Change

An exploration of the social impacts of electromagnetic field effects, considering both positive and negative implications for the future. Also under discussion will be the benefits and harm to future societies from medical science, and some social and economic impacts of alternative energies.

James Beal, non-destructive testing engineer, Martin Marietta Corporation, New Orleans, Louisiana

Peter Goldschmidt, director, Policy Research Institute, Baltimore, Maryland

Bill McGuigan, technologist and physicist, former director of research at SRI International, Los Altos Hills, California

3105

Transition and Transformation

This panel will investigate the next transformation of society and the transformation of societal institutions. The next transformation is seen as that from a competitive to a post-patriarchal society. A look at holistic development of advanced community prototypes is also taken.

Dick Wakefield - Moderator, plans

and process analyst, National Institute of Mental Health, Bethesda, Maryland

Hazel Henderson, author, social critic, civic activist, co-director, The Princeton Center for Alternative Futures, Inc., Princeton, New Jersey.

Eldon Byrd, Naval Surface Weapons Center, White Oak Laboratory, Silver Spring, Maryland

Peter Callaway, initiator, Hexiad Project, Cambridge, Massachusetts

3106

Interdimensional Communications and the Impact of Extraterrestrial Contact

Valerie Jean Ransone, educator, communicator, president, Interplanetary Network, La Jolla, California

3107

Social Transformation: Direction and Outcome (Parts I and II)

Life-style trends and their meanings will be discussed, along with: social paradigms, old and new; personal growth movements; where does social responsibility lie—are we victims?; environmental conditioning—cause or effect?; what social wave are we now riding, and where is it taking us?

Gary Sycalik - Moderator, president, City Foursquare Foundation, Inc., Washington, D.C.

Arnold Mysior, psychologist, Center for Applied Psychology, Washington, D.C.

Gloria Cousar, special assistant to the secretary of the U.S. Department of Housing and Urban Development, Washington, D.C.

Marilyn Ferguson, editor, *Brain Mind Bulletin*; author, *The Aquarian Conspiracy*, Los Angeles, California (Part II only)

Michelle Sycalik, president, American Metaphysical Society, Inc., McLean, Virginia

Milton Friedman, staff assistant, U.S. Congress, Washington, D.C.

3108

Peace-Violence-Transition

This panel will discuss the transition from a war to peace mentality, crime and violence in the Third World, and the course of change in South Africa.

Magne Hekneby, Norwegian Society for Future Studies (SEFREM), Kolbotn, Norway

Bolandi Awe, commissioner, government of Nigeria

Irving Hexam, assistant professor, Philosophy of Religion, Regent College, Vancouver, British Columbia, Canada

3109

Renewal-Action-Common Goals

The focus will be on rural revival and revitalization. The panel will discuss rural action centers for agricultural African natives and the use of alienation in a strategy for the development of common values and goals.

Karl Ostrom, consulting psychologist and director, Community Resource Services, Wadena, Minnesota

Florentin Agoua, director, Rural Action Centers for Agricultural African Natives, Cotonou, Dahomey

James E. Herrick, professor of social work, School of Social Work, University of Washington, Seattle, Washington

3110

Change and Life-Style Levels

The panel will probe the idea that new lifestyles in America will help us survive the transition. Changing values will be explored in terms of *applications* of the levels of existence theory. The panel will also discuss the non-establishmentarian ("out-law") as a possible change agent (as defined by Irv Thomas in his newsletter, which deals with people who are living outside the economic system).

Dick Wakefield - Moderator, plans and process analyst, National Institute of Mental Health, Bethesda, Maryland

Irv Thomas, publisher of *Black Bart* newsletter, Canyon, California

Bill Lee, teacher of psychology, Yorktown High School, Arlington, Virginia

John Ball, professor, Georgia State University, Atlanta, Georgia

3111

Making New-Age Politics Practical and Real for People

This session will define the emerging new transformation-oriented politics and how it differs from the politics of the Democratic and Republican parties as well as from the politics of the Citizens and Libertarian parties. A number of speakers at this conference are on the Governing Council of the New World Alliance, a national, transformation-oriented political organization, and they will speak honestly and openly about the beginnings of the Alliance, their hopes and fears, and their progress to date. Audience participation will be encouraged throughout.

Mark Satin - Moderator, staff person, New World Alliance, Washington, D. C.

Mel Gertov, professor of political science, University of California, Riverside, California

Robert Olson, policy analyst, Office of Technology Assessment, U.S. Congress, Washington, D.C.

Clem Bezold, director, Institute for Alternative Futures, Washington, D.C.

Michael Marien, editor, *Future Survey*, director, Information for Policy Design, Lafayette, New York

Nori Huddle, director, Center for New National Security, Washington, D.C.

James Ogilvy, author, *The Emergent Paradigm*, SRI International, Menlo Park, California

3112

The Tesla Vision Realized: The Techniques of Increasing Human Energy

Valerie Jean Ransone, educator, communicator, president, Interplanetary Network, La Jolla, California

L. Gordon Cooper, president, The Centre for Advanced Technology, La Jolla, California

3113

Toward a Responsible Security System: An Essential Element in a Desirable Future

This panel will discuss various means of winning without wars, such as conciliation, mediation, and non-violent civilian defense, as well as the national security straightjacket and a limit on future op-

tions. Focus will be on the design for a better world.

Barbara Stanford - Moderator, author of *Peacemaking: A Guide to Conflict Resolution for Individuals, Groups and Nations*, Buffalo, New York

Patricia Mische, co-author of *Toward a Human World Order*, East Orange, New Jersey

Donald Keys, author of *Scoreboard on the U.N.*, New York, New York

Hanna Newcombe, editor of *Peace Research Abstracts Journal*, Dundas, Ontario, Canada

Carolyn Stephenson, organizer of COPRED Conference on Alternative Security, Hamilton, New Jersey

3114

Canada: The Next 50 Years

This will be a review of the main factors likely to influence Canada during the period 1980-2030.

John Kettle, writer and consultant, John Kettle Incorporated, Toronto, Ontario, Canada.

Education and Knowledge

The educator as agent of planned change, ways of teaching about the future, the social forces that will shape education in the future, and the experiences of teachers from throughout the world in trying to broaden students' interests in the future are among topics to be covered in the sessions of the education track, some of which have been arranged by the Education Section of the World Future Society.

Track Organizers:

Joel Burdin, Education, American University, Washington, D.C.

Elliot Seif, Education, Temple University, Philadelphia, Pennsylvania

Jim Bowman, Education and Future Studies, University of Houston at Clear Lake City, Houston, Texas

Ted Runions, Lord Elgin High School, Burlington, Ontario, Canada

3201

Mass Education in the Third World via Satellite

The speakers will address the question: Will new television technology enable us to defeat illiteracy in the third world?

Satish Dhawan, Space Education Program, India

K. Mushakaji, United Nations University, Japan

3202

Forum Humanum

This session will discuss the Club of Rome effort to increase public awareness about the need now to improve the future. It will describe the plan to establish work teams of young people (ages 20s-30s) for the study of global issues.

Aurelio Peccei, industrial manager (retired) and co-founder, Club of Rome, Rome, Italy

James Botkin, associate in education, Harvard University, Cambridge, Massachusetts

3203

Futurists and the Global Food Problem

Designed for individuals who are trying to make other people aware of global futures issues, whether in school or community activities. With a slide presentation, participants will be introduced to the variety of ways that futurists approach the world food problem, and the many options open for action at the local, national, and international levels. Participants will be involved in activities that stimulate discussion of the relative merits of possible strategies for creating a world free from hunger.

Mary Kay Howard, professor of history, John Carroll University, Cleveland, Ohio

Betty Barclay Franks, high school social science teacher, doctoral candidate, Carnegie Mellon University, Pittsburgh, Pennsylvania

3204

Futurism As a Management Tool

Panelists will discuss their successes and

mishaps in using futurism in the management of a variety of educational projects, including decisions on the closing of schools in areas with declining populations.

Arthur Steller - Moderator, coordinator of systemwide planning, Montgomery County Public Schools, Rockville, Maryland

Michael N. Sugarman, associate professor, College of Education, University of Akron, Ohio

Carmelo V. Sapone, Department of Education and School Administration, Niagara University, Niagara, New York

George Tracz, associate professor, Ontario Institute for Studies in Education, Toronto, Ontario, Canada

Warren H. Groff, vice president for Academic Affairs, North Central Technical College, Mansfield, Ohio

3205

Universal Education and Learning

How to exploit the emerging understanding of the inner and outer frontiers (the human mind and space) and advanced technology (especially telecommunications satellites) for delivery of information in all subject areas for the creation of richer learning environments. This discussion will also feature resources and references, audio-visual communications, cultural significances, economic-political considerations, and institutional barriers/openings to change.

Carol S. Rosin - Moderator, national chancellor, International Association of Educators for World Peace, Washington, D.C.

Timothy Leary, educator, philosopher, author of *The Intelligence Agents*, Los Angeles, California

Patricia Mische, author of *A Human World Order*; founder, president, Global Education Associates, East Orange, New Jersey

Ellen Burstyn, actress, director, Palisades, New York

Konrad Dannenberg, engineer, scientist, NASA Huntsville Space and Rocket Museum, Huntsville, Alabama

Gayle Phillips, producer and president, Mathexix, Inc., Los Angeles, California

Abdoul Al-Rubaiy, associate professor, international studies, University of Akron, Akron, Ohio

Barbara Marx Hubbard, director, Futures Network, International Committee for the Future, Washington, D.C.

3206

Education, Values, and the Future

An overview of various connections between education and values—the explicit teaching of values, the implicit teaching of values, the values involved in the overall structuring of the educational system. Presentations include need for, and techniques for, taking learners out of narrow perspectives and into a global capacity to

relate to others; and a scenario for post-industrial education.

Marlene Goldsmith - Moderator, Department of Social and Philosophical Foundations of Education, University of Minnesota, Minneapolis

Arthur Harkins, Department of Social and Philosophical Foundations of Education, University of Minnesota, Minneapolis

Roger Westcott, Department of Anthropology, Drew University, Madison, New Jersey

Magorah Maruyama, Department of Administrative Sciences, Southern Illinois University, Carbondale, Illinois

3207

Alternative Futures in Education and Society

Examination of the step beyond industrial-era education and societal perspectives. Divergent future alternatives and dynamic change agents will be examined to construct positive global changes. This session will concentrate upon the educator as agent of planned change.

Jim Bowman - Moderator, University of Houston at Clear Lake City, Houston, Texas

James F. Nolfi, Goddard College, Plainfield, Vermont

John Pulliam, University of Oklahoma, Norman, Oklahoma

Harold Shane, Indiana University, Bloomington, Indiana

3208

Introducing the World

A team of students, a teacher, and program staff will present a multi-media student production to initiate future themes for study and discussion in schools and conferences. Participants in this session will have the opportunity to learn how communities anywhere can design their own program for *Introducing: The World*, a program intended to interest students, teachers, and community members in defining their roles as citizens in a changing world.

Stephanie McCandless Reford, coordinator, Ontario Institute for Studies in Education, Toronto, Ontario, Canada

Alison Hope Lee, field officer, Ontario Institute for Studies in Education, Toronto, Ontario, Canada

(plus three or four students and a teacher)

3209

Teaching for the Future

Describes and examines the need for and use of future-oriented teaching methods and programs at all levels of schooling.

Elliot Seif - Moderator, Temple University, Philadelphia, Pennsylvania

Phillips Brooks, Davis and Elkins College, Elkins, West Virginia

Don Glines, director, State of California

Educational Futures Project, Sacramento, California

Larry Smith, College of the Mainland, Texas City, Texas

3210

Science Fiction: Its Impact on the Future

Science fiction often serves as a way to introduce students to the future and, perhaps even more important, serves to shape our images of the future and to give us new insights into current social issues.

Dennis Livingston - Moderator, policy analyst, State Executive Office of Communities and Development, Boston, Massachusetts

Ann Schoonmaker, family therapist and educator, coordinator for Sunrise House non-profit learning center, Eliot, Maine

Milo Kaufman, English department, University of Illinois, Urbana, Illinois

Frederik Pohl, science-fiction writer, New York, New York

3211

Arts in Education

The future of arts in the public schools reflects the egalitarian tenor of current education philosophy. The old concept of arts in school as play has given way to the idea of arts as necessary for everyone, with special emphasis on ways that arts education can provide linkages for cultural and community resources.

Susan Rosenbaum - Moderator, director of the arts, Montclair Public Schools, Montclair, New Jersey

Peggy Long, director of the arts, State Department of Education, Oklahoma City, Oklahoma

Cecilia Soriano Bresnehan, director of school desegregation programs and former director of the arts, Boston Public Schools, Boston, Massachusetts

Jack Kukuk, director of education, John F. Kennedy Center for the Performing Arts, Washington, D.C.

Stanley Medeja, vice president, Central Midwestern Regional Educational Laboratory, St. Louis, Missouri

3212

No Limits to Learning

The traditional pattern of "maintenance learning" is making "learning by shock" inevitable and this is a formula for disaster. This session will discuss the Club of Rome report, *No Limits to Learning*, which calls for innovative learning that relies chiefly on anticipation and participation.

James Botkin, associate in education, Harvard University, Cambridge, Massachusetts

Aurelio Peccei, industrial manager (retired) and co-founder, Club of Rome, Rome, Italy

3213

Young Futurists in Action

Panel of young futurists discussing the role of youth in the futures movement.

Sherry Schiller, co-ordinator, Schove Justice Project, Young Futurists in Action, Pontiac, Michigan

3214

Changing Human Values and Higher Education

How are values of young people changing? How will these changes affect people's lifestyles, community organization, and attitudes toward uncertainty and complexity as today's young people become the adults of the twenty-first century?

Foster Diebold, president, Edinboro State College, Edinboro, Pennsylvania

Robert M. Beagle, assistant to the president, Edinboro State College, Edinboro, Pennsylvania

Harry Wagschal, professor of sociology and humanities, Dawson College, Montreal, Quebec, Canada

Thomas Mace, Digital Equipment Corporation, Marlboro, Massachusetts

3215

Evolutionary Futurism: Applied Theories of Emergence and Transformation

A presentation of a synthesis of findings from general systems theory suggesting a unified field theory of human and physical behavior, and the application of these general principles and universal patterns of change to the study and creation of the future. Consideration of current research on the mind and its promise to transform the evolution of the human species will be explored.

Gus Jaccaci, president, Interrobang Ideas, Thetford, Vermont

Robin King, systems scholar, art educator, Sheridan College, Oakville, Ontario, Canada

Jeffrey Stamps, systems scholar, writer, Whitehead Stamps Associates, West Newton, Massachusetts

3216

Futures Planning in Third World Colleges and Universities—The Case of Taiwan

Recent work with colleges and universities in Taiwan will be discussed, in an effort to evaluate certain long-range planning processes. Are data about societal trends and value shifts applicable in other countries? Will participatory planning work in a setting different from the place where the process was designed? Those attending this session will learn about the processes outlined in the book, *A Futures-Creating Paradigm*, as well as taking part in the attempt to evaluate use of those processes in Third World institutions.

Marina Buhler-Miko, program director, Resource Center for Planned Change of the American Association of State Colleges and Universities, Washington, D.C.

Albert W. Brown, president, State University College at Brockport, Brockport, New York

Arthur H. DeRosier, Jr., president, East Tennessee State University, Johnson City, Tennessee

Charles B. Vail, president, Winthrop College, Winthrop, South Carolina

Daniel E. Marvin, Jr., president, Eastern Illinois University, Charleston, Illinois

James H. Young, president, State University College at Potsdam, Potsdam, New York

Roy E. McTarnaghan, vice chancellor for academic programs, State University System of Florida, Tallahassee, Florida

Alan E. Guskin, chancellor, University of Wisconsin-Parkside, Kenosha, Wisconsin

3217

University Programs in Future Studies

Sharing accomplishments and goals pursuant to university programs in futures.

Fred Kierstead - Moderator, University of Houston at Clear Lake City, Houston, Texas

Irving Buchen, dean, School of Humanities, California State College, San Bernardino, California

Arthur Harkins, College of Education, University of Minnesota, Minneapolis, Minnesota

O.W. Markley, chairperson, Studies of the Future Program, University of Houston at Clear Lake City, Houston, Texas

Burt Nanus, director, Center for Futures Research, University of Southern California, Los Angeles, California

Peter Wagschal, University of Massachusetts, Amherst, Massachusetts

3218

Changing Household Energy Use

Discussion emphasizes the need for management of scarce resources by efficient/effective individuals and families to obtain a desired quality of life.

Bonnie Braun, family resource management specialist, Home Economics Cooperative Extension, Oklahoma State University, Stillwater, Oklahoma

Sue Williams, energy management specialist, Home Economics Cooperative Extension, Oklahoma State University, Stillwater, Oklahoma

3219

University Programs: Resources and Needs

Current social forces that will shape higher education institutions of the future, and some of the ways that present university personnel are attempting to prepare for the future will form the basis for this discussion among representatives from a variety of institutions.

Gary Gappert - Moderator, director, Institute for Futures Studies and Research, University of Akron, Ohio

Alvin C. Eurich, president, Academy for Educational Development, New York, New York

Arthur Shostak, professor of psychology and sociology, Drexel University, Philadelphia, Pennsylvania

Belden Paulson, chairman, Center for Urban Community Development, University of Wisconsin, Milwaukee

William Conboy, professor of speech communications and human relations, University of Kansas, Lawrence, Kansas

William Conboy, professor of speech communications and human relations, University of Kansas, Lawrence, Kansas

3220

Educational Technology

The discussion will focus on the impact of various types of technology on education: home computers and information retrieval systems, distance education systems, and audio visual packages generally. Will the use of television, perhaps combined with computers and other electronic marvels, allow us to teach people faster and more efficiently? Or will it turn students into automatons who find no joy and no shadings of values in what they learn?

John Splaine, associate professor in educational communications, University of Maryland, College Park, Maryland

Ken Imison, dean, School of Education, Darling Downs Institute of Advanced Education, Toowoomba, Australia

Christopher Dede, policy fellow, Planning Office, National Institute of Education, Washington, D.C., and president, World Future Society Education Section

David Berry, lecturer, Stockwell College of Education, Bromley, England, United Kingdom

Carl Stafford, assistant professor, Stewart Audio Visual Center, Purdue University, West Lafayette, Indiana

Ilbert Walker, researcher in distance learning systems, London, Ontario, Canada

Adrea Olympia Fineza, director, Distance Study System, Ministry of Education and Culture, Manila, Philippines

3221

Anticipatory Leadership in Education

New arrangements can be designed, developed, and tested for training more effective educational leaders, and it is crucial to the future of our institutions and students that we do so. Planning processes can be established that are continuous sources of institutional renewal and redefinition.

Walter L. Marks, superintendent of schools, Montclair, New Jersey

Harvey Scribner, director of the Center for the Study of Collective Bargaining in Education, University of Massachusetts School of Education, Amherst, Massachusetts

3222

Emerging Crucial Issues for School and Society

Examines substantive, normative, and conceptual issues. For example, attention will be given to the imbalance between technological innovation and social invention. The near future of education and society will be presented as probable technological and social inventions are analyzed.

Al Peakes - Moderator, editor, *Education Tomorrow*, director of futures studies, Montclair Public Schools, Montclair, New Jersey

Dwight Allen, Old Dominion University, Norfolk, Virginia

Christopher Dede, policy fellow, Planning Office of the National Institute of Education, Washington, D.C.

W. Basil McDermott, Simon Fraser University, Burnaby, British Columbia, Canada

3223

Teaching International Relations: Purposes and Processes

This activity-oriented workshop for pre-collegiate teachers will offer an overview of methodologies to effectively teach about international relations using issues, skills, or concepts as possible frameworks.

Barry Simmons, lecturer and program coordinator, Center for Teaching International Relations, Graduate School of International Studies, University of Denver, Colorado

Junelle Barrett, teacher, associate, Center for Teaching International Relations, Graduate School of International Studies, University of Denver, Colorado

Ronald D. Schukar, instructor, Center for Teaching International Relations, Graduate School of International Studies, University of Denver, Colorado

3224

Educating the Businessmen of the Future

Business needs to consider the effects of changes that may take place and be prepared to bring desired future conditions into being. Schools of business need to make the businessmen of the future aware of these factors.

Donald Mulvihill - Moderator, coordinator, Institute for 21st Century Business, Kent State University, Kent, Ohio

William Lazer, professor of marketing and future environments, Michigan State University, East Lansing, Michigan

Robert Holloway, professor of marketing, University of Minnesota, Minneapolis, Minnesota

Eugene Kelley, dean, College of Business, Pennsylvania State University, University Park, Pennsylvania

John Keane, president, Managing Change, Inc., Barrington, Illinois

3225

The University and Increased Public Service

Various models for increasing the relevance of contemporary universities are being explored, principally by direct involvement in public service. This session will feature reports on experiences today at various North American universities.

Anthony M. Fuller - Moderator, director, Rural Development, Outreach Project, University of Guelph, Ontario, Canada

Noreen Dowling, administrator, Public Service Research Program, Division of Extended Learning, University of California, Davis, California

Richard A. Hagood, program administrator, Partnership for Rural Improvement, Washington State University, Pullman, Washington

Laszlo Bodnar, Ontario government economist, Toronto, Ontario, Canada

3226

Teaching Futures in Elementary and Secondary Schools

Representatives of schools from the United Kingdom, Australia, South Africa, Canada, and the United States will discuss techniques and reasons for teaching about the future and its problems and possibilities.

Joel Burdin - Moderator, professor of educational administration, College of Education, American University, Washington, D.C.

David E. Smith, teacher, Lamphere High School, Madison Heights, Michigan

Richard Slaughter, teacher, doctoral candidate, Department of Educational Research, University of Lancaster, England

David Berry, lecturer, Mass Media Communications Department, Stockwell College of Education, Bromley, England, United Kingdom

Andrew Freeman, teacher and community education specialist, Melbourne, Australia

C.H. Boshoff, professor of economics and director of the Institute for Future Studies, Department of Economics, Potchefstroom University for Christian Higher Education, Potchefstroom, South Africa

Ben Hoffman, planning officer, University Grants Commission, Winnipeg, Manitoba, Canada

3227

Lifelong Learning

Lifelong learning is becoming increasingly important as people are expected to stay current on exploding information within their own field, or to learn to change careers as the one they were trained for becomes obsolete. This session will consider various ways of providing learning opportunities to adults, as well as reasons for doing so.

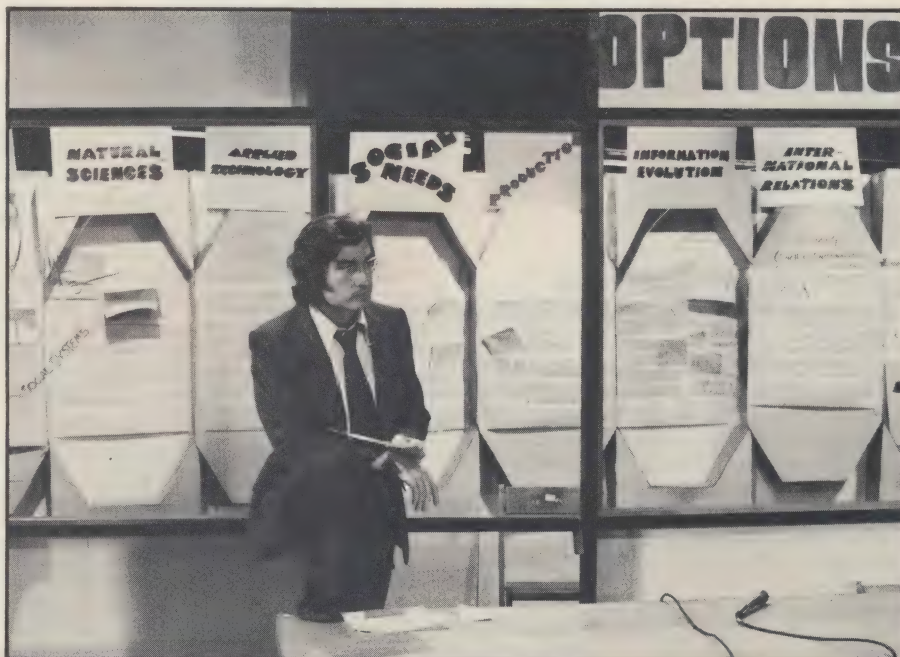
Robert J. Snavely - Moderator, staff development director, Kohler Public Schools, Kohler, Wisconsin

Rexford G. Moon, managing director, Future Directions for a Learning Society, a project of the College Board, New York, New York

Iris Elfenbein, director of teacher education, American Council of Life Insurance, Washington, D.C.

Winifred Warnat, director, Teacher Corps Project, American University, Washington, D.C.

Francine Hardaway, director, Arizona Futures Institute, Rio Salado Community College, Phoenix, Arizona



3228

Futures Courses for the Gifted

Ways of introducing intellectually gifted students to the skills and philosophy of futuristics are proving increasingly important as educators recognize the need to challenge these exceptional youngsters and, perhaps even more important, the need to provide special skills and understanding for people who will be the leaders of the twenty-first century.

Draper Kauffman - Moderator, educational consultant, futurist, St. Louis, Missouri

Elizabeth Stafford, resource teacher for gifted and talented students and head of the futuristics program for the Anne Arundel County Public Schools, Annapolis, Maryland

Robert M. Fitch, professor of social studies and education, University of Iowa, Iowa City, and co-author of *Futures Unlimited*

Ann Washington, gifted and talented consultant, Norfolk Public Schools, Norfolk, Virginia

Lena Lupica, futurist educational consultant, Washington, D.C.

Ronald Klein, gifted and talented consultant for new-age education, Washington, D.C.

3229

Designing Curricula for the Future

What will people need to know in the twenty-first century, and how should we teach today's youngsters so that they will be effective citizens in the information age?

Joel Barker - Moderator, president, Infinity Limited, Inc., West St. Paul, Minnesota

Kathleen Redd, Department of Interdisciplinary Studies, St. Cloud College, St. Cloud, Minnesota

Draper Kauffman, futurist, education consultant, St. Louis, Missouri; author, *Teaching the Future*

Richard Sampson, director, Center for Human Development, Mountain Lakes, New Jersey

Cordell Svengalis, director of admissions for the Graduate Program in Urban and Regional Planning, University of Iowa, Iowa City; co-author of *Futures Unlimited*

3230

Appropriate Education for the 80s

Discussion of the nature of an educational process that would prepare young people for a world of change in a context of restrained resources. It would focus on the importance of acknowledging the reality of individual learning patterns, of recognizing the limitations of child and youth schooling, and of focusing on the essentiality of continuing but interrupted education.

Walter G. Pitman - Moderator, president, Ryerson Polytechnical Institute, Toronto, Ontario, Canada

3231

Implications of the Brain-Mind Revolution for Education

Discusses results from a national Delphi study on the implications of brain-mind developments, emphasizing the results seen as most important for the next 20 years. Participants will be involved in an experiential series of exercises including visualization, accelerated time production, direct brain stimulation, guided imagery, cross-sensing, and body-brain processing. It is relevant for personal development,

teacher training, and elementary and secondary classroom use.

Diane Battung - Moderator, principal researcher on the Delphi study, Institute for Teacher Leadership, Los Angeles, California

Beverly Galyean, director of the Confluent Education Project, Los Angeles City schools; education editor for the Association of Humanistic Psychology

Maureen Murdock, senior instructor, St. Augustine By the Sea School, Los Angeles; and an associate of Jean Houston's Foundation for Mind Research

Futures Know-How and Methodologies

This track will provide two concurrent sessions throughout the entire conference. One set of sessions is designed to provide futurists with specific, practical knowledge on a variety of futures techniques. These are the technical how-to-do-it sessions. For example: how to write scenarios, develop alternative futures, forecast technology change, predict stockmarket changes, run a cross-impact analysis, modify forecasted trends, use computer models, structure system dynamic simulations, produce human judgement profiles, conduct social audits, and profile life-style changes.

To augment the technical sessions, leading futurists from both the public and private sectors have prepared lectures and in many cases are bringing together experienced panelists in order to share insights into the successes and failures of futures research. These sessions will focus on the impact that futures know-how has had on the society to date and, of course, what to anticipate for the future.

Track Organizers:

Pam Kruzic, Federal Aviation Administration, Washington, D.C.

Wayne Boucher, senior research associate, Center for Futures Research, University of Southern California, Los Angeles, California

3301

Six Alternative Futures for the United States

This presentation will review the major elements determining the future of American society. Emphasis will be given to technological change, bureaucratization, the rise of the middle class, institutionalization of problems and solutions, and a host of other social changes. Out of this interplay, Coates will offer a synoptic review of six major alternative views of the American future.

Joseph F. Coates, president, J. F. Coates, Inc., Washington, D.C.

3302

Interactive Cross-Impact Simulation

This panel will discuss the current status of interactive cross-impact simulation models and their role in the exploration of alternative futures for strategic planning. Among the techniques to be discussed are INTERAX, Future Scan, and the Boardroom. Special attention will be given to the nature and availability of these techniques for business and government planners, now and in the future.

Selwyn Enzer - Moderator, associate director, Center for Futures Research, University of Southern California, Los Angeles, California

Theodore Gordon, president, The Futures Group, Glastonbury, Connecticut

Paul Gray, chairman, Department of Management, Cox School of Business, Southern Methodist University, Dallas, Texas

3303

Critique of Futures Research

This session will examine the futures planning and research that makes a difference in policy-making. It will review criteria for judging the quality and utility of results from futures research.

Roy Amara, president, Institute for the Future, Menlo Park, California

Andrew Lipinski, senior research fellow, Institute for the Future, Menlo Park, California

3304

Influence of Assumptions on Forecasts

Investigates ways in which incompatible assumptions have produced conflicting forecasts, examines methods for detecting and clarifying implicit assumptions, and suggests how assumptions can be improved.

Thomas E. Jones - Moderator, associate professor, Polytechnic Institute,

Brooklyn, New York, and The New School for Social Research, New York, New York; author of *Options for the Future*

Willis Harman, policy analyst, associate director of the Center for the Study of Social Policy, SRI International, Menlo Park, California

O.W. Markley, chairperson, Studies of the Future Program, University of Houston at Clear Lake City, Houston, Texas

Anthony J. Wiener, professor of management and director, Public Policy Studies, Polytechnic Institute, Brooklyn, New York, and consultant, Hudson Institute, New York

3305

Technology Assessment

This session will have a methodological orientation and will explore recent needs in the theory and practice of technology assessment. Two presentations will address the synergism between system science, value-oriented discourse, and technology assessment. Three additional presentations will describe on-going programs in community-based solar technology assessment, the coal-utilization assessment carried out by the Environmental Protection Agency, and a policy assessment of nuclear wastes disposal.

Alexander N. Christakis - Moderator, professor, University of Virginia, Charlottesville, Virginia

Andrew P. Sage, professor, University of Virginia, Charlottesville, Virginia

Benson H. Bronfman, group leader, Oak Ridge National Laboratory, Oak Ridge, Tennessee

Gordon A. Enk, director, The Institute on Man and Science, Rensselaerville, New York

Michael K. Bergman, policy analyst, Environmental Protection Agency, Washington, D.C.

Pamela A. Rich, University of Virginia, Charlottesville, Virginia

Bradley S. Stewart, University of Virginia, Charlottesville, Virginia

3306

Anticipations and Outcomes: How the Self-Fulfilling Prophecy Really Works in Economics, Education, Science, and Politics

Using numerous examples, this section explores the vital but counterintuitive ways in which social and economic forecasts and predictions themselves affect the outcomes anticipated, including cases of repeated predictions with positive feedback between the predictor's prestige and predictive accuracy, recent calls for the deliberate manipulation of social predictions, and ways in which self-fulfilling prophecies can be harnessed or go out of control.

Richard L. Henshel, associate professor of sociology, University of Western Ontario, London, Ontario, Canada



3307

Sociopolitical Forecasting: A Management Tool

Modern managers today seek both to create the future and then to fit their corporation to it. The panel will discuss sociopolitical forecasting and its management implications for corporations and other institutions, using a public policy process model, an issue management process model, and a legislative forecasting model.

Raymond P. Ewing - Moderator, director of Issues Management, Allstate Insurance Company, Northbrook, Illinois

Barrie L. Jones, vice president, W. Howard Chase Enterprises, Inc., Stamford, Connecticut

William L. Renfro, president, Policy Analysis Company, Inc., Washington, D.C.

3308

Strategic Scanning for Corporate Planning

This presentation will deal with how corporations scan future developments: what trends they monitor; what techniques they employ; who in the organization does this type of work and what problems they face. The presentation is based on a study that involved personal interviews in 15 large corporations and a questionnaire that was mailed to the *Fortune* 500 United States corporations.

Edith Weiner - Moderator, executive vice-president, Weiner, Edrich, Brown, Inc., New York, New York

Subhash Jain, assistant dean, School of Business Administration, University of Connecticut, Storrs, Connecticut

3309

Social Indicators and Social Forecasting

This session will examine the use of social indicators in forecasting social conditions.

Robert Parke - Moderator, executive director, U.S. Social Science Research Council, Center for Coordination of Research on Social Indicators, Washington, D.C.

Hans J. Adler, Statistics Canada, Ottawa, Canada

David Brusegard, chief of the Social Indicators Unit, Statistics Canada, Ottawa, Canada

Donald J. Hernandez, U.S. Social Science Research Council, Center for Coordination of Research on Social Indicators, Washington, D.C.

Alex C. Michalos, director, Social Indicators Research Programme, University of Guelph, Guelph, Ontario, Canada

Lester W. Milbrath, director, Environmental Studies Center, State University of New York at Buffalo, New York

3310

The Role of Ritual in Contemporary Western Organization: Future Trends

Reviews the nature and impact of ritual and how they have been used in historical settings. Looks at the power of ritual forms from various perspectives, e.g., organizational, managerial, psychological, as well as ritual power to liberate or constrain.

W. Lynn Tanner, associate professor, Faculty of Management, University of Calgary, Calgary, Alberta, Canada

Robert J. Allio, consultant, Robert J. Allio and Associates, editor, *Planning Review*, Concord, Massachusetts

3311

Small Group Techniques for Operational and Strategic Thinking

This panel will survey the state-of-the-art in techniques for distilling the judgment of a group on the complex issues usually encountered in operational and strategic planning, especially in the private sector. Special attention will be devoted to a highly effective computer-assisted methodology called the Focused Planning Effort (FPE). Actual experience with FPE's will be described and evaluated from the points of view of the designer, the participant, and various users of the results.

Wayne Boucher - Moderator, senior research associate, Center for Futures Research, University of Southern California, Los Angeles, California

Larry Michels, president, The Santa Cruz Operation, Inc., Santa Cruz, California

3312

Alternative Scenarios As a Tool for Improving Industry and Government Planning

This session will examine what people are using scenarios for in their organization and describe how scenarios can be used for planning.

James Bright, president, Industrial Management Center, Inc., N. Edgecomb, Maine

John Vanston, president, Technology Futures, Inc., Austin, Texas

3313

Policy Impact Analysis

Policy impact analysis is a third generation method of forecasting that builds on first

generation (implicit forecasting) methods and second generation (explicit forecasting) methods. It focuses on developing forecasts that include decision-makers' policy responses to forecasts of an otherwise undisturbed future. This session will describe policy impact analysis, discuss its practical applications, and also discuss the theoretical basis of the method and its link to older forecasting methods.

William L. Renfro - Moderator, president, Policy Analysis Company, Inc., Washington, D.C.

Wayne L. Boucher, senior research associate, Center for Futures Research, University of Southern California, Los Angeles, California

Herb Gerjuoy, Program Strategies, Inc., West Hartford, Connecticut

3314

Utopias and Ideologies

This session will feature a discussion of pedantic utopias and ideologies versus predictive utopias and ideologies: diversity versus absolutism in socially constructing policy for the future.

Peter J. Jessen - Moderator, director, Policy Analysis and Design Division, Data Solutions Corporation, Vienna, Virginia

Charles L. Miller, director of research, Policy Analysis and Design Division, Data Solutions Corporation, Vienna, Virginia

Robert M. Gianetti, executive director, Public Committee for the Humanities in Pennsylvania, Philadelphia, Pennsylvania

Frederic A. Brussat, editor, Cultural Information Service, New York, New York

3315

Measuring Attitudes Toward the Future

One of the most pressing problems confronting persons interested in promulgating a futures orientation is the lack of measurement instruments in the area. This session presents the current state of three years' efforts at developing a quantifiable survey instrument to measure futures perspectives. Results of recent efforts to validate the survey through publication in the *World Future Society Bulletin* will be reported.

Geoffrey H. Fletcher, co-founder and teacher, Milford Futurology Program, Milford, Ohio

Gary D. Wooddell, co-founder and teacher, Milford Futurology Program, Milford, Ohio

3316

Futures Analysis: Simple and Complex

This panel will discuss the range of methods available for futures research in an organizational context. A simple process-oriented approach called QUEST (Quick Environmental Scanning Technique) can generate a first order approximation to im-

portant environmental variables in a matter of a few days of work. On the other extreme, INTERAX (Interactive Cross Impact Simulation) is a complex computer-based tool that permits deep analysis of alternative scenarios and policy options in a comprehensive and systematic fashion. Between these two extremes, a variety of familiar futures research techniques can be combined into a design for the analysis of an issue, as will be illustrated in this panel by a discussion of a study of the future of consumer finance.

Bert Nanus - Moderator, director, Center for Futures Research, Graduate School of Business Administration, University of Southern California, Los Angeles, California

Selwyn Enzer, associate director, Center for Futures Research, Graduate School of Business Administration, University of Southern California, Los Angeles, California

Wayne Boucher, senior research associate, Center for Futures Research, Graduate School of Business Administration, University of Southern California, Los Angeles, California

3317

The Future of Future Studies

Promotes a sober appraisal of the past and present of future studies worldwide, and the impact on society to date. Each speaker will devote at least one-third of his presentation to a bold futures orientation—using forecasts, scenarios, and/or proposals for the entity of their choice (future studies, future research, futuristics, etc.)

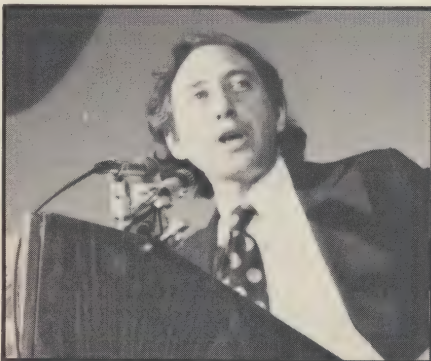
Michael Marien - Moderator, editor, *Future Survey*, director, Information for Policy Design, Lafayette, New York

Edward Cornish, editor, *The Futurist*, and president, World Future Society, Washington, D.C.

Richard Henshel, editor, *Futures Canada*, and associate professor of the Department of Sociology, The University of Western Ontario, London, Ontario, Canada

Ralph Jones, editor, *Futures: The Journal of Planning and Forecasting*, Guilford, England, United Kingdom

Harold Linstone, editor, *Technological Forecasting and Social Change*, and direc-



tor Futures Research Institute, Portland State University, Portland, Oregon

Stuart S. Nagel, editor, *Policy Studies Journal*, Department of Political Science, University of Illinois, Urbana, Illinois

Hugues de Jouvenel, editor, *Futuribles*, Paris, France

3318

System Dynamics Framework for National Policy Planning

For the past eight years, the System Dynamics National Model has been under development at M.I.T. The model is now beginning to illuminate the interrelated issues of inflation, energy, lagging capital investment and productivity, and resource depletion. This special session will overview the model structure and approach, and focus on deeper understanding.

Peter M. Senge, professor, Systems Dynamics Group, Massachusetts Institute of Technology, Cambridge, Massachusetts

Nathaniel Mass, professor, Systems Dynamics Group, Massachusetts Institute of Technology, Cambridge, Massachusetts

3319

Relationship of Evaluation and Public Policy to Futures Forecasting in a Government Environment

Members of the panel are experienced practitioners in two major analytical areas, evaluation and program analysis and the relationship to policy formulation which is futures-oriented. The panel will discuss how to build monitoring systems for assessment and analysis which lend themselves to futures forecasting.

Wallace M. Cohen - Moderator, planning director, Evaluation Issue Area, U.S. General Accounting Office, Washington, D.C.

Fred Haynes, director, cooperative technology, U.S. Department of Commerce, Washington, D.C.

Joe Nay, president, Performance Development Institute, Washington, D.C.

Harry Piccariello, head of evaluation staff, National Science Foundation, Washington, D.C.

Allan Gilmore, director of evaluation, Auditor General's Office, Ottawa, Canada

David Peterson, director of Washington office, Southern Growth Policies Board, Washington, D.C.

Saul Gass, School of Business, University of Maryland, College Park, Maryland

3320

International Political Risk (Forecasting)

World political risk forecasts help businesses and governments in assessing the risks they face from political events in major countries throughout the world. Both short-term and long-term forecasts are provided for a series of business risks. World summaries of the probability of po-

litical change in various countries will be discussed. Country reports providing an explanation and elaboration of the forecasts will also be covered.

Mike O'Leary - Moderator, Syracuse University, Syracuse, New York

Manny Singer, Shell Oil, Houston, Texas

William Renfro, president, Policy Analysis Company, Inc., Washington, D.C.

3321

The Practical Utilization of Futures Research (Roundtable Panel Discussion)

This roundtable/panel will provide an opportunity to discuss the practical realities of using futures research in the context of existing organizations and agencies. The panel will discuss their experiences in state and federal agencies and the corporate sector. The audience will be invited to discuss their own experiences and to help identify effective approaches to increasing the current utilization of futures research and information.

Gary Gappert, director, Institute for Future Studies and Research, University of Akron, Ohio

William Christopher, management counsel, Stamford, Connecticut

3322

Early Warning Systems

Surprise comes from the unexpected. Throughout the past decade, corporations and public institutions have all too often been rudely surprised, both by the occurrence of situations that were unexpected and by the nonoccurrence of situations that were expected. In order to reduce surprise in the future, early warning systems are being developed in all major institutions. This panel will provide a balanced view of early warning systems that actually exist in major corporations, the federal government, and in a university research center.

Richard Drobnick, director, Twenty-Year Forecast Project, Center for Futures Research, University of Southern California, Los Angeles, California

William Renfro, president, Policy Analysis Company, Inc., Washington, D.C.

Robert H. Moore, emerging issues coordinator, The Conference Board, Washington, D.C.

3323

Current Social Inventions

Social inventions are new procedures, organizations, or laws that change the way in which individuals or groups relate to themselves and to others. This panel will review recent social inventions in education, psychology, and advocacy and their impact on the functioning of social institutions.

D. Stuart Conger, director, Occupational and Career Analysis and Develop-

ment Branch, Department of Manpower and Immigration, Ottawa, Canada

3324

From the Corporate Social Audit to Strategic Performance Management

Several years ago, a small group of consultants, academicians, and corporate officials began to experiment with the concept of the "corporate social audit," as a way to measure the social impact of a corporation. Various techniques ranged from simple inventories of vaguely defined social performance to double-entry cost-benefit analyses. Although most such techniques were impractical and, in retrospect, naive, they laid the groundwork for an evolution into something much more necessary: concepts and techniques that can help a large corporation better understand and react to an increasingly complex operating environment.

This discussion will trace the evolution from social audit to strategic performance management and outline several specific corporate systems for grappling with an uncertain future.

David C-H Johnston, vice president, Human Resources Network, West Hartford, Connecticut

James L. Hetland, Jr., senior vice president, Urban Affairs, First Minneapolis Bank, Minneapolis, Minnesota

James E. Post, associate professor of management, Boston University, Boston, Massachusetts

3325

Emergent Paradigm: Foundations of Future Beliefs

A paradigm is like a lens through which we interpret ourselves and our world. When paradigms change, civilizations change. We are now in the process of going through a change as great as the shift from a flat to a round earth. The implications for management, government, science, technology, and society will be explored in this session.

Peter Schwartz, senior policy analyst, SRI International, Menlo Park, California

James Ogilvy, consultant, SRI International, Menlo Park, California

3326

Futures Research Then and Now—Its Brief Past; Its Potential

An inquiry into the success and failures of futures research over the past decade and a half. What have we learned? Whom have we influenced? Have we been looking in the right directions? What is the appropriate agenda for the next decade?

F. John Pessolano - Moderator, counsel in public relations and public affairs, New York, New York

Herbert G. Gerjuoy, president, Program Strategies, Inc., West Hartford, Connecticut

Thomas E. Jones, professor, the New

School for Social Research, New York, New York

Burt Nanus, director, Center for Futures Research, University of Southern California, Los Angeles, California

3327

Changing Values and a Changing Workforce: The Relationship Between Values, Technology, and Innovation

Analysis of the workplace requires an integration of changing structures in the workforce, innovation, and the input of new technology. This session will examine how these changes create and are affected by new values.

Florence Skelly, vice-president, Yankelovich, Skelly and White, New York, New York

Joe McPherson, senior staff, SRI International, Menlo Park, California

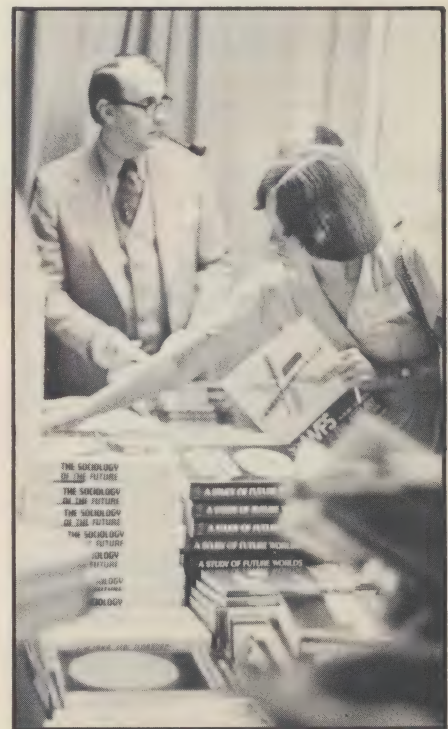
Tom Anyos, director of technology and innovation management, SRI International, Menlo Park, California

3328

Exploring the Future with Both Sides of the Brain

Futures research methodology can gain much by applying recent findings from brain research and psychology of consciousness. Specific techniques and underlying theory will be presented. If time allows, an experiential "visionary" technique will be demonstrated and discussed in terms of practical applications.

O.W. Markley, chairperson, Studies of the Future Program, University of Houston at Clear Lake City, Houston, Texas



Work and Careers

During the 1980s, the workplace will witness the continued emergence of multiple careers, second careers, and greater overall job flexibility for men and women. Changing values and life-styles as well as greater participation in management will change businesses and the surrounding community.

Greater sensitivity to the needs of the individual worker, whether working at home or in a centralized facility, will contribute to his health and safety, and overall sense of involvement in his job and place of work.

Track Organizers:

Tom O'Brien, internal consultant, U.S. Department of Labor, and chairman of the Center for Future Management, Washington, D.C.

Michael Wass de Czegi, principal, Krupsak-Wass de Czegi Management Consultants, Buffalo, New York.

3401

The New Worker

Examines the emerging new worker with respect to changing values reflected in life-styles and women's liberation.

Richard Balzer, vice-president, Yankelovich, Skelly and White Inc., New York, New York.

3402

Inventing Your Own Job

This workshop will explore how individuals can provide themselves greater work flexibility, choose a second career, find alternatives to the 9-5 job, and have multiple careers. Limited to 30 people.

John Applegath, director, The Human Economy Center, Salem, New York

3403

New Jobs, New Careers: How Do We Get There?

Discussion will explore how skills and knowledge influence mobility, personal growth, and new careers.

Gregory B. Smith, senior associate, National Manpower Institute, Washington, D.C.

3404

The Participative Option

This session explores employee participation in management, in terms of their need to be involved. Includes discussion of necessary personal skills and information, forms of leadership, and autonomous working groups.

William Halal, associate professor of management, School of Government and Business Administration, George Washington University, Washington, D.C.

3405

Reversing the Third-World Brain Drain

Opportunities for education and employment have historically been outside the Third World. This session will focus on the nature of this problem and approaches to reversing the "brain drain" and providing Third-World countries the benefit of this expertise.

N.S. Ramaswamy

3406

Quality of Working Life

Changing work expectations by workers provide a challenge to management to provide a better quality work experience. This session focuses on changing values related to the quality of work in different settings.

Charles Bolyard, director of employee development, Lincoln National Life Insurance Company, Fort Wayne, Indiana

Tom O'Brien, internal consultant, U.S. Department of Labor, Washington, D.C.

3407

The Future of the Professions

As changing values and work requirements refine traditional notions of professions, new work categories will emerge. This session will examine professions undergoing change and describe new career areas.

Lisa Carlson, investigator, Executive and Management Development Division, U.S. Office of Personnel Management, Washington, D.C.

Connie Larson, director of health and manpower, Department of Health, Minnesota state government, St. Paul, Minnesota

3408

Forecasting Your Future Career

In recent years, several approaches have been developed to assist career planners and seekers to incorporate future thinking into career development methods. This workshop will give participants some knowledge of these methods, which are also used by futurists making forecasts and strategic plans. Limited to 30 people.

Juliet V. Miller, director, author, ERIC Clearinghouse for Adult Career and Vocational Education, National Center for Research in Vocational Education, Ohio State University, Columbus, Ohio

Marion Jones Percival, career workshop coordinator, faculty member, Hunter College, New York, New York

3409

The Evolving Labor Organization

Changing worker values related to work and the quality of the work place provide

new challenges for organized labor. This session will discuss organized labor's ability to cope with change.

Michael D. Whitty, assistant professor, College of Business, University of Detroit, Michigan

3410

Work, Careers, and the Family—The Social Significance of Rising Female Employment

New world patterns are emerging. The United States, Canada, Sweden, and the nine Common Market countries are all following the same path. Mass effective contraception is widely available, the rapidly growing service and information sectors are incorporating millions of women of all social classes and ages into the labor force, motherhood as an occupation is declining, and the fertility rate is plummeting in all Western economies at about the same rate of speed.

Jeanne Binstock, director, Consumer and Management Trends, Inc., Ottawa, Canada

3411

The Blue Collar in a Post-Industrial World

This session considers automation versus humanization, and the impact of ethnicity, "cardless aliens," and feminization of the workplace.

Arthur B. Shostak, professor of sociology, Drexel University, Philadelphia, Pennsylvania

Steven Confer, assistant to the executive vice president, Communication Workers of America, Washington, D.C.

3412

Alternative Work Schedules

Focuses on flexitime, part-time work, job sharing, and job pairing, and their impact on the community, the individual, and work.

Suzanne Smith, co-director, New Ways to Work, San Francisco, California

Stanley Nollen, assistant professor, School of Business Administration, Georgetown University, Washington, D.C.

Jerry E. Boger, business planning consultant, Reynolds Metals Company, Richmond, Virginia

3413

Trends in the Workforce

Explores career opportunities, the future of the professions, and individual career interests.

Gary Gappert, director, Institute for Future Studies and Research, University of Akron, Ohio

Robert P. Quinn, associate research sci-

entist, Survey Research Center, Institute of Social Research, University of Michigan, Ann Arbor, Michigan

3414

Scenario for the Future of Work

A scenario for the future of work will be constructed in terms of motivation, compensation, location, interrelationships, objectives, and work structure

Gary Liefkowitz, New York State Joint Labor Management Committee on Work Environment and Productivity, Albany, New York

Betsy Gelb, associate professor of marketing, University of Houston, Texas

3415

What Is Work?

This session explores the philosophical, psychological, theological, economic, physical, social, and historical aspects of work and leisure. The discussion will focus on the positive and negative connotations of work, enrichment versus work, the implications of the work ethic, and the possibility of a work-free society.

Michael Wass de Czegi, principal, Krupsak-Wass de Czegi Economic Planning and Finance, Buffalo, New York

Margaret Genovese, director of planning and community relations, Canadian Opera Company, Toronto, Ontario, Canada

Business Directions

The business track will look at the issues the business community will be facing over the next two decades. It won't be a gloom and doom track; it is designed with the belief that business has a role to play in solving the problems we face. The panel will have a management perspective and every effort will be made to insure take-home value for the participants.

Track Organizers:

Ronna Klingenberg, director, Trend Analysis Program, American Council for Life Insurance, Washington, D.C.

Jim Webber, management consultant, Lexington, Massachusetts

John J. Wettlaufer, School of Business Administration, University of Western Ontario, London, Ontario, Canada

3501

Visionary and Creative Management

A session on introducing out-of-context thinking to business, public, and educational institutions. This will be an intense how-to-do-it session, to be followed (if possible) by an afternoon or evening breakout workshop.

Jay S. Mendell - Moderator, visiting professor, Florida Atlantic University, and editorial chairman, *Business Tomorrow*, Boca Raton, Florida

Stel Kefalis, associate professor, University of Georgia, Athens, Georgia

F.D. Barrett, president, Management Concepts Ltd., Scarborough, Ontario, Canada

Tony Grogan, certified public accountant, Coopers and Lybrand, West Palm Beach, Florida

This session will also include students of the graduate course in Visionary and Creative Management at Florida Atlantic University via a video tape film presentation.

3502

Preparing Tomorrow's Corporate Cosmopolitans

A presentation on the need for future corporate leaders to become more cosmopolitan in their perspectives. Particular attention will be devoted to the development of skills in managing cultural differences for service in the international marketplace.

Philip R. Harris, president, Harris International, La Jolla, California

Dorothy L. Harris, professor and associate dean, School of Business and Management, United States International University, San Diego, California

3503

Co-operatives and the Future (Session I)

As democratic organizations with broad social and economic objectives, co-operatives are an organizational form particularly well suited to enabling people to grasp and shape their future. Two sessions are presented exploring co-operative approaches to grappling with the future in a number of countries.

This session will focus on the general applicability of cooperatives to participatory



futures processes, that is, thinking globally.

Kai Blomquist, Co-operative Institute, Stockholm, Sweden

Jack Craig, Co-operative Future Directions Project, Toronto, Ontario, Canada

John Jordan, Co-operative Future Directions Project, Toronto, Ontario, Canada

A. F. Laidlaw, Project 2000, International Co-operative Alliance, London, England, United Kingdom

3504

Co-operatives and the Future (Session II)

This session will present selected examples of co-operatives grappling with futures issues in a number of countries, that is, acting locally.

Kai Blomquist, Co-operative Institute, Stockholm, Sweden

Jack Craig, Co-operative Future Directions Project, Toronto, Ontario, Canada

John Jordan, Co-operative Future Directions Project, Toronto, Ontario, Canada

A. F. Laidlaw, Project 2000, International Co-operative Alliance, London, England, United Kingdom

3505

Consumerism in the Future

Panelists with excellent and varied backgrounds will offer their perspective on the role of the consumer in years ahead.

Mark Green, director, Congress Watch, Washington, D.C.

Stanley E. Cohen, Washington editor, *Advertising Age*, Washington, D.C.

David Schoenfeld, consumer advocate, J.C. Penney Company, Inc., New York, New York

Jeremy Mitchell, director, National Consumer Council, London, England, United Kingdom

3506

Managerial Ability to Deal with Organizations as a Whole

Executives' career paths usually begin in line positions, and by the time they arrive at the corporate level they are confronted with a task that they never dealt with before. This session will provide a conceptual framework and some basic approaches to training executives for top management.

Paul Rubinyi, partner, Ernst and Whinney, Montreal, Quebec, Canada

Frank Santangeli, vice president-marketing, Sun Life of Canada, Toronto, Ontario, Canada

Orgy Carss, assistant vice president-special assignments, Bell Canada, Hull, Quebec, Canada

3507

The Future of the Stakeholder

A look at management's key constituent

cies by authorities in stakeholder analysis. Tentative plans are to invite some people from the audience to participate in a role play of the corporation as an "open-system" composed of key constituencies interacting with management.

William E. Halal - Moderator, associate professor of Management Science, School of Government and Business Administration, George Washington University, Washington, D.C.

R. Edward Freeman, project manager of Stakeholder Management, Applied Research Center, The Wharton School, Philadelphia, Pennsylvania

Stephen Nolan, chairman, Human Resources Network, Philadelphia, Pennsylvania

3508

Analyzing and Forecasting World Markets

Techniques for measuring and forecasting markets and the marketing strategies recently adopted by multi-national companies will be explored. Topics will include world economic outlook to year 2000, microelectronics, and international implications of energy demand and supply.

Andrew Gross - Moderator, professor of marketing and international business, Cleveland State University, Cleveland, Ohio

Gordon McDougall, associate, Sir Wilfrid Laurier University, Waterloo, Ontario, Canada

Samuel Wolpert, president, Predicasts, Inc., Cleveland, Ohio

Arthur Cordell, economic adviser, Science Council of Canada, Ottawa, Canada

3509

Corporate Futurism

A look at how futures research and emerging issues analysis fits into corporate decision-making. An overview of potential problems, a survey of the state of the art in *Fortune* 500 corporations, and a look at what's needed next will be included.

Ronna Klingenberg - Moderator, director of the Trend Analysis Program, American Council of Life Insurance, Washington, D.C.

John Naisbitt, senior vice-president, Yankelovich, Skelly and White, New York

Hank Koehn, vice-president for futures research, Security Pacific Bank, Los Angeles, California

Subhash C. Jain, professor of marketing and assistant dean for research and management development programs at the School of Business Administration, University of Connecticut, Storrs, Connecticut

3510

Thinking Globally, Acting Locally: A Credo for MNC's

Multi-national corporations already find

themselves in a crossfire between the economic logic of internationalism ("thinking globally") and the political logic of nationalism ("acting locally"). The powerful tug and pull of these conflicting forces will not be easily or quickly resolved, but the future success of MNC's depends on finding some accommodation.

Lynne Hall, manager, Macro-Market Analysis, American Telephone and Telegraph Company

Ian Wilson, consultant, Public Policy Research, General Electric Company, Fairfield, Connecticut

Pierre Wack, Royal Dutch Shell, London, England, United Kingdom

Andre van Dam, director of planning for Latin America, CPC International, Inc., Buenos Aires, Argentina

3511

Managing in an Uncertain World

Discussion of uncertainty in the years ahead—what driving forces are that create uncertainty and how business can cope with uncertainty, using techniques such as international risk assessment and strategic planning.

J.J. Wettlaufer - Moderator, professor, School of Business Administration, University of Western Ontario, London, Ontario, Canada

Robert Delaney, senior analyst, Philip Morris, New York, New York

3512

Corporate Images of the Future

This session will discuss how corporations are projecting views of the future through their advertising, public relations, and public affairs activities.

Joan Mebane, manager, Communications Research Co-ordinator, 21st Century Program, Philip Morris, New York, New York

David Brown, director, Creative Services, Champion International Corporation, Stamford, Connecticut

Ray Ewing, director, Emerging Issues, Allstate, Northbrook, Illinois

3513

Future Opportunities Workshop

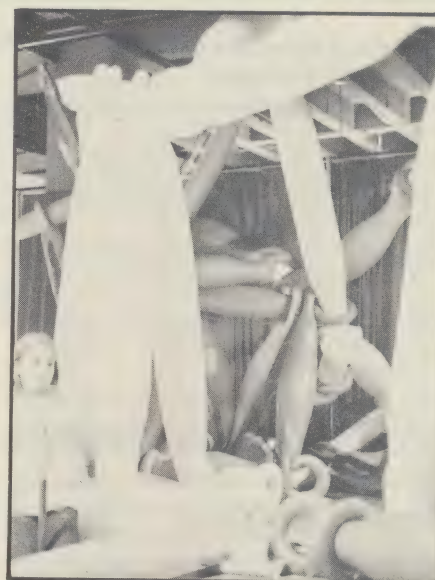
Using the information developed in the other tracks in the conference and the individual resources in the room, Webber will lead the group in an exercise designed to develop a list of business opportunities in the 80s. Webber will use a structured process to help the group generate hundreds of ideas.

James Webber, management consultant, Lexington, Massachusetts

3514

Industrial Technology Transfer to the Third World

This session will focus on the types of industrial technology suitable for the Third



World and the means to most effectively transfer it.

Keshab Mahandra, industrialist, Mahandra and Mahandra, India

W.K. Chagula, Tanzania

3515

Institutional and Cultural Innovation

This session will examine the interplay between institutional and cultural innovation. Of particular interest will be the ability to deliberately steer, fashion, and control creativity and hence technological change during the next decade.

Michael Michaelis, senior consultant, Arthur D. Little, Inc., Washington, D.C.

Bertrand Chatel, chief, Technology Applications, United Nations, New York, New York

C. Joshua Abend, president, The Abend Group, Syracuse, New York

Georges Gueron, president, International Foundation for Social Innovation, Paris, France

3516

Managers for the Twenty-First Century

Traditional approaches to management education are inappropriate to the Post-Industrial Age. This session will focus primarily on the need to develop the creative talents of tomorrow's executives so that they may successfully manage change.

Max Clarkson, dean of management studies, University of Toronto, Ontario, Canada

Peter Moore, associate dean, Faculty of Management Studies, University of Toronto, Ontario, Canada

George Leonidas, associate chairman, Commerce and Finance Program, University of Toronto, Ontario, Canada

Frank Feather, controller for domestic regions, Canadian Imperial Bank of Commerce, Toronto, Ontario, Canada; editor, *Business Tomorrow*

3517

Developing Managers to Meet Tomorrow's Problems

This session will examine how to prepare managers to cope with the future. A special emphasis is on how industry and its management can solve the international requirement for one billion jobs by the end of this century.

Frederick G. Harmon, president, American Management Association, New York, New York

John McArthur, vice president, American Management Association (International), New York, New York

Robert A. Wilson, Northland Bank, Calgary, Alberta, Canada

3518

The Future of Manufacturing

The end of heavy manufacture in the developed world is at hand. To prevent near-catastrophic impact on wealth, on employment, and on the supply of goods, radical and painful readjustments will be required of manufacturers, of industrial workers, and of Western society and its institutions.

Felix Kaufmann, Science for Business, Inc., Ann Arbor, Michigan

digit way of life and a European perspective

John Hough, Royal Trust Company, Toronto, Ontario, Canada

Gary Spraakman, senior consultant, Currie, Coopers and Lybrand, Ltd., Vancouver, British Columbia, Canada

3606

Stock Market Forecasts for the Eighties

The next decade presents many new challenges and opportunities. How will these affect the stock market?

Leslie J. Silverstone, vice president, Dean Witter Reynolds, Washington, D.C.

James W. Fraser, president, Fraser Management Associates, Inc., Burlington, Vermont

3607

The Management of Economic Opportunities in a Time of Constraints

Gappert will emphasize the relationship between social development and economic reconstruction. Hamrin will focus on a national perspective with emphasis on federal policy. Blair will focus on the regional and urban dimensions. A common theme might be "Emerging Discontinuities in the National Economic System."

Gary Gappert - Moderator, author, *Post-Affluent America*; director, Institute for Futures Studies and Research, University of Akron, Akron, Ohio

Robert Hamrin, economist, President's Commission for a National Agenda for the Eighties, Washington, D.C.

John P. Blair, professor, Urban Affairs and Business Administration, University of Wisconsin, Milwaukee, Wisconsin; author, *Managing Growth in the 1980s*

3608

Investing: The World Is Your Oyster

A discussion of investment alternatives with some emphasis on a money manager's perspective.

Bob Shoniker - Moderator, senior partner, Management Resource Group, Toronto, Ontario, Canada

John M. Templeton, president, Templeton Funds, Nassau, Bahamas

Steve Yahn, publisher, *Collector-Investor*, Chicago, Illinois

Robert Tebbutt, vice-president, Conti Commodities, Toronto, Ontario, Canada

3609

Economics of Change

Seeking an understanding of sustainable growth, this session will discuss how technology influences economic growth, the use of utilization value, and the non-monitorized portion of the economy. Particular emphasis will be on new sets of national accounts that take into consideration knowledge and technology.

James Coomer - Moderator, associate professor of public management and

Economics and Finance

The sessions outlined here address some of the major issues, prospects, trends, or questions concerning economics and finance over the next two decades. Where possible, authoritative speakers will present their views in a forum where the audience will have a chance to interact with the presenters.

Track Organizer:

Robert Shoniker, senior partner, Management Resource Group, Toronto, Ontario, Canada

3601

A Future of World Trade and Economic Nationalism

A panel discussion addressing the possibility that trade sanctions will cripple trading patterns.

A. Barsony, director, Organization for Economic Cooperation and Development, Paris, France

3602

New Directions of "New Economics"

A three-hour "bowl" where persons with a view on non-traditional economics will be offered a forum to present their views to the world.

Ray Whitman - Moderator, professor, School of Government and Public Administration, American University, Washington, D.C.

Harvey D. Wilmeth, vice-president, Northwestern Mutual Life Insurance, Milwaukee, Wisconsin

Vern Atrill, executive vice-president, Gallup Canada, Toronto, Ontario, Canada

T. Fujii, professor, Nagaya University, Nagaya, Japan

A. Roukens DeLange, Department of Applied Math, University of Witwatersrand, Johannesburg, South Africa

3603

Is There a Cycle in Your Future?

A model of inter-industrial dissemination of technological change is offered as the underpinning of long technical development periods as an alternative to long waves.

Harvey D. Wilmeth - Moderator, vice-president, Northwestern Mutual Life

Insurance Company, Milwaukee, Wisconsin

Christian de Bresson, science advisor, Science Council of Canada, Ottawa, Canada

Ian Notley, vice-president, Dominion Securities Inc., New York, New York

Norman Alcock, Canadian Peace Research Institute, Oakville, Ontario, Canada

3604

The Family, Economic Productivity, and Social Progress

Until the professionalization of modern state and corporate bureaucracies, the family and its immediate extensions had always served as society's basic source of economic productivity. The presenters of this session believe that there is a fundamental link between growing socio-economic stagflation and the decline of domestic enterprise. Inexpensive computers and communications links may facilitate the renewal of the essential economic and social contributions of small, familial groups, and thus help to restore a healthy balance of power to highly bureaucratized societies.

David Pearce Snyder, consulting futurist, life-styles editor of THE FUTURIST, Bethesda, Maryland

Gregg Edwards, program manager, Knowledge for National Productivity, National Science Foundation, Washington, D.C.

3605

Inflation: A Future Fact of Life

This session asks whether it is time for a new approach and discusses the double

faculty member, Studies of the Future, University of Houston, Clear Lake City, Texas

W.H.C. Simmonds, policy analyst, National Research Council of Canada, Ottawa, Canada

R.B. Hoffman, director, Structural Analysis Division, System of National Accounts and Analysis, Ottawa, Canada

B. McInnis, Structural Analysis Division, System of National Accounts and Analysis, Ottawa, Canada

Robert Hamrin, economist, President's Commission for a National Agenda for the Eighties, Washington, D.C.

3610

Ultra Technology and the Financial Manager of Tomorrow

This session will examine the role that mini-computers, new technology, and the communications explosion will play in global financial management.

Leonard Gordon, managing partner, Ekston Technology Group GMBH, Munich, West Germany

3611

A Latin American Development Strategy to the Year 2000: Can the Past Serve As a Guide to the Future?

Three basic issues have dominated Latin American development policy during 1950-1980; namely, economic growth, external vulnerability, and social welfare. This panel will examine trends of the past 30 years in order to suggest a new and different Latin American development strategy to the year 2000; namely, a strategy that contemplates continued growth but with an enhanced degree of domestic equity and simultaneously a greater degree of independence within a world of increasing interdependence.

David H. Pollock, director, Washington Bureau of the United Nations Economic Commission for Latin America, Washington, D.C.

3612

International Financial Flows: An Examination of Future Supply-Demand Gaps

Will the World Bank and IMF continue to play their dominant roles in providing public funds? Can a solution be found to the financial problems of non-oil producing developing nations? Will they continue to be bailed out by commercial banks?

Elliott R. Morss, director of research, Development Alternatives, Inc., Washington, D.C.

Philip Wellms, assistant professor, Harvard Business School, Cambridge, Massachusetts

Jean Baneth (France), assistant director, finance, Programming and Budget Department, World Bank, Washington, D.C.

Andrew H. Gantt II, division chief, IMF Institute, International Monetary Fund, Washington, D.C.

Politics and Governance

"New age politics" or back to basics, centralization or decentralization, authoritarianism or anticipatory democracy will frame discussions of trends and possible futures for politics and governance.

Trends in North America, the rise of the Third World, global justice, and the future of international governance will provide a distinctive international character to many of the sessions. However, other sessions will focus on shifting values, government regulations, and strategic planning in North America.

There are special sessions on future research in legislative and anticipatory democracy to provide in-depth examination of how government is using a variety of techniques to involve citizens in more systematic exploration of the future.

Track Organizers:

Clem Bezold, director, Institute for Alternative Futures, Washington, D.C.

Robert Logan, communications theorist and public policy analyst, University of Toronto, Ontario, Canada

3701

The Future of North America

Discusses the possible futures of North America with emphasis on possible changes in national boundaries and possibilities of discord and the opportunities of cooperation.

Robert Logan - Moderator, communications theorist and public policy analyst, University of Toronto, Ontario, Canada

Victor Ferkiss, professor of government, Georgetown University, Washington, D.C.

Magda McHale, director, Center for Integrative Studies, and research professor in environmental design, School of Architecture and Environmental Design, State University of New York, Buffalo, New York

3702

Third-World Forum

This session will bring forth the views of the Third World on problems of governing, including those resulting from population growth and those related to the worldwide food and energy situation.

Andre van Dam, director of planning for Latin America, Corn Products Latin America, Buenos Aires, Argentina

Rashmi Mayur, director, Urban Development Institute, Bombay, India

Alfred Bernhart, professor and environmental consultant, University of Toronto, Ontario, Canada

3703

The Prospects for Global Justice

Given increasing defense budgets and the end of the "trickle down" approach to redistribution of wealth in developed countries during the high-growth period of the last 30 years, what are the prospects that justice within and among nations will be realized in the 1980s?

Hazel Henderson - Moderator, co-director, Princeton Center for Alternative Futures, Inc., Princeton, New Jersey

Zia Uddin Sardar, London, England, United Kingdom

Warren W. Wagar, professor of history, State University of New York, Binghamton, New York

3704

The Biological Revolution and Government

This session will examine the present and expected biological experimentation and its impact on government.

Gretchen Kolsrud - Moderator, program manager, Genetics and Population, Office of Technology Assessment, U.S. Congress, Washington, D.C.

Robert Francoeur, chairman, Biological and Allied Health Sciences, Fairleigh Dickinson University, Madison, New Jersey

3705

The Future of Citizen Participation

Formal attempts by government to involve citizens in decision-making in both the United States and Canada have increased dramatically in recent years. This session will attempt to get practical as to what is happening in existing public involvement programs that may indicate directions of such activities for the next decade. Active audience participation in the session will be encouraged.

James L. Creighton - Moderator, consultant in public involvements, Creighton and Creighton, Saratoga, California

Jerry Delli Priscoli, social scientist, Institute for Water Resources, U.S. Army Corps of Engineers, Fort Belvoir, Virginia

3706

Anticipatory Democracy

The 1970s saw a host of experiments in what Alvin Toffler called Anticipatory Democracy—efforts to involve citizens more directly in steering their city or state. This session will examine some of these, including the oldest—Hawaii—and the

first in a heavily industrial state—Illinois. Prospects for the 1980s, including electronic referendums and related developments, will be considered.

David Baker - Moderator, executive director, Illinois 2000, Chicago, Illinois

Doreen Leland, program director, Hawaii Commission on the Year 2000, Honolulu, Hawaii

Clem Bezold, director, Institute for Alternative Futures, Washington, D.C.

Robert Hanie, Environment and People Program, Sangamon State University, Springfield, Illinois

3707

New Faces for Authoritarianism: From Friendly Fascism to the Sacred Collectivity and Crazy States

Around the world a variety of new forms of authoritarianism are growing or being revived: advances in communication and management styles, increased political activity by religious groups, and renewed restrictions on civil rights. Leading writers and futurists will consider the implications of these trends for the 1980s.

Bertram Gross, distinguished professor of public policy and planning, Hunter College, New York, New York

Yehezkel Dror, professor of political science, The Hebrew University, Jerusalem, Israel

Harold Linstone, editor, *Technological Forecasting and Social Change*; director, Futures Research Institute, Portland State University, Portland, Oregon

3708

Integrating Foresight into the Legislative Process

This session will focus on the application and utilization of futures research in the legislative policy process. There will be a brief overview of the history, current status, and future directions for congressional interest in the future. Attention will be directed to the practical development of a futures information and analytical support capability in the Congressional Research Service and the Congressional Clearinghouse on the Future/Congressional Institute for the Future.

Dennis Little - Moderator, specialist in futures research, Science Policy Research Division, Congressional Research Service, Library of Congress, Washington, D.C.

Walter A. Hahn, senior specialist in science, technology, and futures research, Congressional Research Service, Library of Congress, Washington, D.C.

Daniel W. Kratochvil, executive director, Congressional Institute for the Future, Washington, D.C.

3709

The Future of International Governance

A myriad of trends constitute "the transition we are in," and the fact that it is a transition means there will be changes in both the content and the process of international relations. This session will discuss the international functions of the future and the kind of institutional change that might help a community of nations to cope with these changed functions.

Harlan Cleveland - Moderator, director, Program in International Affairs, Aspen Institute for Humanistic Studies, Princeton, New Jersey

Maurice Strong, honorary chairman, First Global Conference on the Future, Toronto, Ontario, Canada

Thomas W. Wilson, Jr., past director, Program in Environment and Quality, Aspen Institute, Washington, D.C.

3710

The Paradigm Shift and Politics

This session will explore in some detail the political implications of what writers have called the paradigm shift in our values, life-styles, and organizational behavior.

Robert Olson - Moderator, Energy Group, Office of Technology Assessment, U.S. Congress, Washington, D.C.

James Ogilvy, author, *The Emergent Paradigm*; SRI International, Menlo Park, California

Benjamin T. Hourani, professor, Department of Political Science, Eastern Michigan University, Ypsilanti, Michigan

Mark Satin, staff person, New World Alliance, Washington, D.C.

3711

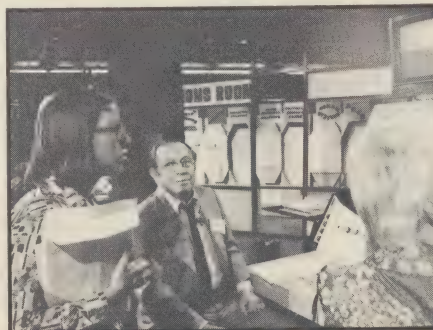
Culture, Values, and Politics: Transformation or Back to Basics

This session will be a discussion between those who argue that current changes in values really combine to create a "new age politics" or a transformation in the way the political system operates, and those who feel that current changes are simply the rejection of experiments that have failed and a return to the basic values and operating styles that were left behind during the 1960s and 1970s.

Mark Satin, staff person, New World Alliance, Washington, D.C.

Charlie Rose, congressman from North Carolina, U.S. House of Representatives, Washington, D.C.

Mel Gertov, professor of political sci-



ence, University of California, Riverside, California; co-author of *The Pentagon Papers* and author of *Making Changes: The Politics of Self-Liberation*

Dorothy Dean, supervisor, Milwaukee County Board, Milwaukee, Wisconsin

3712

Futures Research in Legislatures

Legislatures in the United States and Europe have made initial steps in the use of futures research and related techniques to anticipate emerging issues, identify the side effects of decisions, and consciously set priorities in relation to their images of the future. This session will review the development of those techniques and where they may lead during the 1980s.

Clem Bezold - Moderator, director, Institute for Alternative Futures, Washington, D.C.

William Earle Klay, assistant professor, Florida State University, Tallahassee, Florida

Kenneth Hunter, associate director for program information, Policy Analysis Division, U.S. General Accounting Office, Washington, D.C.

Hugues de Jouvenel, social scientist, secretary-general and general delegate of the Association Internationale Futuribles, Paris, France

3713

The Future of Federalism

An exploration of the fiscal, administrative, and public policy trends toward centralization and decentralization.

David Beam - Moderator, senior analyst, Advisory Commission on Intergovernmental Relations, Washington, D.C.

Bruce Stokes, senior researcher, Worldwatch Institute, Washington, D.C.

J. Stephan Dupre, University of Toronto, Ontario, Canada

3714

Strategic Planning in Government Agencies

This session will consider the use of futures research—particularly for long-term, strategic planning in executive branch agencies. The last 20 years included a significant (though intermittent) growth in both the techniques and the use of futures research and related techniques within agencies. This session will consider that growth and future prospects.

Kenneth F. Gordon - Moderator, director of planning, U.S. National Bureau of Standards, Washington, D.C.

Gregory Tassey, senior economist, U.S. National Bureau of Standards, Washington, D.C.

Wayne Boucher, senior research associate, Center for Futures Research, University of Southern California, Los Angeles, California

Gerald O. Barney, director, Global Study 2000, Washington, D.C.

GENERAL TOPICS

These sessions are seen as important contributions to the Conference Program. Their inclusion under General Topics is due to their applicability to several areas, a specialized focus, as well as some relatively late additions to the program which could not be incorporated into the planning of individual tracks.

4001

From the Antiquity to Tomorrow: Oswald Spengler

This discussion is based on the idea of repetition applied to a long historical expanse of time. Focuses on how different civilizations at different stages unfold according to a general pattern.

J.E. Havel, Laurentian University, Sudbury, Ontario, Canada

4002

Chronology of the Future

An examination of alternative futures which may face society, including current goals and trends, roles of government, economics, population growth, religion, man's survival.

Ernest Jernigan, professor, Social Sciences Department, Central Florida Community College, Ocala, Florida

Ralph E. Hamil, marketing research specialist, General Electric Company, New York, New York; contributing editor, *THE FUTURIST*

4003

Mobilization of Constructive Human Characteristics—An Imperative for the Future

The major parameters of the contemporary world crisis ("world problematique") have been fairly well identified, and the directions for solution are becoming increasingly evident. There is the need for rational management of environment and resources, for social justice and a new international order, for recognition of interdependence, and for cooperation among nations as a global network, a "family of nations," in such areas as disarmament and peace, control of population growth, and several related aspects of these basic needs.

Janis A. Roze, professor of biology, City College of the City University of New York, New York

Jim Botkin, associate in education, Harvard University, Cambridge, Massachusetts

Willis Harman, associate director, Center for the Study of Social Policy, SRI International, Menlo Park, California

4004

Understanding Canada's Future—An American's Guide to Canada

An exploration of the Canadian character and the essential patterns shaping Canada's future.

Ruben F. W. Nelson - Moderator, vice president, Square One Management Ltd., Ottawa, Canada

4005

What We Do Now: Immediately Available Possibilities

This session will concentrate on how people can act to deal with rapidly changing conditions. It will suggest ways to improve the quality of life for individuals, neighborhoods, and communities. It will also examine the parallel necessary changes in national socio-economic conditions.

Robert Theobald, generalist, lecturer, writer in the area of futures, Wickenburg, Arizona

4007

Futures Research in European Countries

A discussion of the kinds of research undertaken in several European countries in both university and government-sponsored organizations.

Arthur Bronwell - Moderator, formerly dean of engineering, University of Connecticut (retired); author, *Science and Technology in the World of the Future and Freedom—The Democracy of the Future* (to be published in 1980)

Karol Pelc, director, Forecasting Research Center, Wroclaw, Poland

Mihai Botez, senior research fellow, Systems Studies Division, University of Bucharest, Romania

4008

The International City

The international city is a new approach to a constructive world peace built upon the foundation of culture. The arts, sciences, and education are to be developed under the auspices of the United Nations and its agencies in a planetary setting beginning in Toronto and spreading to countries throughout the world.

Paul Weinzwieg, sociologist, president, United Nations Association, Toronto, Ontario, Canada

4009

Metaperspectives for the Future: Economy, Technology, Culture, and Spirit

Each panelist will present a view of the future of humankind from a higher order metaperspective. Each metaperspective will provide a *different* context for long-term future. Discussion which follows will focus on the similarities and differences in each of these metaperspectives and help clarify the potential of each view for shaping the course of our future.

Ronald Hull - Moderator, associate professor, Graduate School of Business, Atlanta University, Atlanta, Georgia

Barbara Marx Hubbard, director, Futures Network, International Committee for the Future, Washington, D.C.

D. Perry Ginn, senior vice president, Day's Inn of America, Atlanta, Georgia

Howard I. Thorsheim, associate professor of psychology, St. Olaf College, Northfield, Minnesota

4010

New Directions for Future Creativity

This session intends to set the direction for our society's future creativity in order to help direct it towards our new guiding value judgements. Emphasis is on human life and global community rather than on materialistic product-oriented technology.

Alfred P. Bernhart, consultant in environmental planning and engineering, Toronto, Ontario, Canada

4011

Excerpt from *Before The Time of The Cockroach*

A scenario imagining an age of catastrophe during 1984-2000, which provides a setting for survivors to consider alternative futures for the twenty-first century.

Suzanne Josephine Clayton, professor of political science, St. Louis Community College, St. Louis, Missouri

4012

Europe Facing the Future

This session will be devoted to a discussion of the rise of the prospective approach in Europe (concepts, methods, and case studies) and the change and stakes for Europe with regard to international problems, including geopolitical relationships, finance, energy, economy, and technology, and to internal problems such as demography, regions, agriculture, and industry.

Michel Godet, Forecasting and Assessment in the Field of Science and Technology Programme (FAST), Commission of

the European Communities, Brussels, Belgium

Hugues de Jouvenel, secretary general and general delegate, Association Internationale Futuribles, Paris, France

Andre Cournand, professor emeritus, Department of Medicine, College of Physicians and Surgeons, Columbia University, New York, New York

Philippe de Seynes, director, Project on the Future, The United Nations, New York, New York

4013

Climate and Human Behavior

Uses a model based on the research of Raymond Wheeler to examine the possible implication of climate on mass human behavior. Will look at the implication of probable weather trends.

Digby Dodd, economic forecaster and principal of Dodd and Associates, Wiltshire, United Kingdom

4014

The Future Triangle: The Soviet Union, China, and Japan

Basic flaws have developed in governments which call for fundamental reorientation of philosophy, structure, and economics. Complex world issues call for better professional enlightenment and major shifts to reorganized institutions.

Frank Snowden Hopkins - Moderator, vice president, World Future Society, Washington, D.C.

Arthur Bronwell, retired dean of engineering, University of Connecticut, Storrs,

Connecticut, and author of the soon-to-be published book, *Freedom—Democracy of the Future*

Allen Whiting, Center for Chinese Studies, University of Michigan, Ann Arbor, Michigan

4015

Oral Communications Through the 80s (I, II)

This presentation will predict the form and content of platform speaking, formal speaking using the media, and speaking to the community on behalf of social issues. Special emphasis will be placed on use of rational persuasion versus propaganda devices and the use of public oratory for resolution of uncertainty.

Gerald Phillips, professor of speech communication, Pennsylvania State University, University Park, Pennsylvania

Gerard Hauser, associate professor of speech communication, Pennsylvania State University, University Park, Pennsylvania

Douglas Pedersen, associate professor of speech communication, Pennsylvania State University, University Park, Pennsylvania

Herman Cohen, professor of speech communication, Pennsylvania State University, University Park, Pennsylvania

Julia Wood, assistant professor of speech communication, University of North Carolina, Chapel Hill, North Carolina

David Stern, assistant professor of theater arts, Pennsylvania State University, University Park, Pennsylvania

Stuart Kaplan, assistant professor of

broadcasting, Pennsylvania State University, University Park, Pennsylvania

4016

Reporting the Future

Representatives from publications in the futures field will discuss how they seek out and evaluate for their readers forecasts of events that will affect their lives in the near-term future. The publications' editorial and reporting procedures will be discussed along with the hazards of putting it on the line.

A. J. Vogl, editor, *Next* magazine, New York, New York

Judson Gooding, executive editor, *Next* magazine, New York, New York

Nicholas J. Tortorello, senior partner, Dresner, Morris & Tortorello, New York, New York

Edward S. Cornish, president, World Future Society, Washington, D.C., editor, *THE FUTURIST*

John Kettle, president, John Kettle, Inc., Toronto, Ontario, Canada; editor, *Forewatch*

4017

Release of Creative Energies of the Masses

The large populations of the Third World hold a great potential for creativity. This discussion will suggest ways to tap this potential as well as describe examples of how this has already been done.

P. Wignaraja, United Nations University, Tokyo, Japan

4018

Opportunity of the Commons: Proposals to Get From Here to There

Focusing on how to select and implement solutions that have surfaced in sessions on energy, food, and the environment, this session will seek to identify actions which can be taken. This will be done by examining coping mechanisms, communications and control technologies, as well as ways to affect learning and human perceptions.

Walter Rudnicki, president, Policy Development Group, Ottawa, Canada

Sally Woodhead, IBI Group, Toronto, Ontario, Canada

Richmond Olson, Ottawa, Canada

Douglas Baily, IBI Group, Toronto, Ontario, Canada

4019

The Opportunity of the Commons: An Invitation for Proposals

An invitation will be issued to international participants at the conference to prepare and submit proposals for global solutions to international problems. Alternative organizations to review and assess these proposals will be posed.

Douglas Baily, IBI Group, Toronto, Ontario, Canada



IDEA EXCHANGE

Individuals have been provided with an opportunity to communicate their ideas or a description of their futuristic activities to the conference. These are presentations that have not appeared elsewhere in the program. In addition, some of these individuals will have prepared papers, which they will discuss in small groups or on a one-on-one basis as part of the "Papers Fair."

Space Application for Space Ports

A lawyer's view of possible future developments in space—transplanetary cooperation, Lunar taxes, claim jumping, and vigilante justice.

Valerie Leister, lawyer, Rio de Janeiro, Brazil

Education of Children in Underdeveloped Lands

An examination of child development in the third world.

Padma Seth, director, Child Development Program, India

Preventing Future Shock in Educational Technology

Discussion on the potentialities and pitfalls of current and new educational technologies.

Carl Stafford, assistant professor, Audio-Visual Center, Purdue University, West Lafayette, Indiana

Communicating Science and Technology to the Broad Populace

Translating technology, science, and ideas into salable commodities.

Jonathan Karas, director and physicist, Science House, Manchester, Massachusetts

Support, Don't Supplant the Home: Trend Intervention in Residential Services for the Mentally Retarded

An overview of the problem of caring for and housing the mentally retarded.

Ed Skarnulis, faculty member, Department of Family Practice, University of Nebraska Medical Center, Omaha, Nebraska
Leanna Skarnulis, high school English and journalism teacher, Omaha, Nebraska

Future Therapeutic Programs for Life Adjustment

Discussion on the need for linking systems for bringing existing therapeutic services to the handicapped; descriptions of model programs of "deinstitutionalization" and "normalization."

Paul F. Fendt, vice president, North Carolina Association for the Emotionally Troubled, Chapel Hill, North Carolina

How the S3 Program Compares With Future Studies Programs

Description of the S3 (Social Systems Sciences) Program and its focus on preactive thinking (predicting the future and adapting to it) and proactive thinking (selecting a preferred future and what to do to achieve it).

Kent Myers, graduate student, Wharton School of the University of Pennsylvania, Philadelphia, Pennsylvania

A Future Policy Studies Minor Program in a University

Establishing a futures program, what it includes, its interdisciplinary nature (having courses from all schools on campus), planned development.

Linda J. Groff, associate professor, Department of Political Science, California State University, Dominguez Hills, Carson, California

Outdoors Indoors—Applications for Future Environments

Presentation, with slides, pulls together the areas of architecture, psychology, nature, design.

Stephen L. Albert, environmental designer, STA-Research into Humane Environments, University City, Missouri

The Future of Rational Thinking: Turn of the Millennium Phenomena

A session focusing upon rational mental health and self-control and its struggle with turn of the millennium thinking.

Albert Adams, director of counseling, Lehigh County Community College, Schnecksville, Pennsylvania

A Meaningful Life After Age 65

A program to present a view of senior citizens as a force socially, economically, and politically.

Ralph S. Beren, health care consultant, Ashcom, Beren and Hough, Baltimore, Maryland

The Future from the Fifties

An enumeration and analysis of the dreams, nightmares, and forecasts of the decade.

Howard J. Dooley, associate professor of history, Western Michigan University, Kalamazoo, Michigan

Systems in Symbiosis

A session of experimental and real societies and how they and the components in each system (society) can work together and the conditions when this can happen.

Albin Anderson, chemical engineering consultant, Swedish Forest Products Laboratory, Stockholm

Future of the Food Service Industry

Trends of foods of the future, food distribution systems of the future, and physical structure of restaurants and kitchens of the future.

Jeffrey P. Berlind, executive vice president, Restaurant Business, Inc., New York, New York

Environment Assets of the Third World Countries

A focus on the environmental aspects of the third development decade.

Delmar Blasco, project coordinator, Environment Liaison Centre, Nairobi, Kenya

Societal Impacts of Future Energy Technologies and Lessons Learned from the Present

A discussion of a number of energy sources in addition to fusion.

Robert B. Braid, Jr., research associate, Oak Ridge National Laboratory, Union Carbide Corporation, Oak Ridge, Tennessee

Using the Apparel and Textile Industry As Indicator of a Country's State of Development

An awareness of economic development is possible through a review of changes in the textiles and apparel industry.

Mary Barry, college professor, Auburn University, School of Home Economics, Auburn, Alabama

The Age of the Multinationals

A discussion of the multinational enterprise, foreign direct investment, and the changing place of business in the U.S. and world economies.

Jack N. Behrman, professor of business administration, University of North Carolina, Chapel Hill, North Carolina

Project IDA

Discussion of Project IDA and the rural fibre optics experiment in Elie, Manitoba.

Bill Cordray, public relations, Manitoba Telephone System, Winnipeg, Manitoba, Canada

Futuring Course for Bright High School Students

A discussion of a course which is multi-disciplinary, tapping the cream of social speculation, science-fiction, trends in the arts and sciences, decision-making strategies, simulations, and practices in business and industry worldwide.

Marilyn Cooper, curriculum coordinator, Rufus King School for the College Bound, Milwaukee, Wisconsin

Values Engineering: A Holistic Futures Methodology for Policy Studies

An experimental method involving a series of paradigms that creates an integrated system that provides for questions, qualities, and values interaction.

F. James Clatworthy, associate professor, Oakland University, Rochester, Michigan

Future Systemagenetics

An examination of Systemagenetics, a name for the conceptual enterprise which systematically investigates the ways human images come about.

Aristide H. Esser, president, Association for the Study of Man-Environment Relations, Inc., Orangeburg, New York

Business Activation: The Cost of Information

Focuses chiefly on business planning and organizational development.

John Fenner, executive director, Sudbury 2001, Sudbury, Ontario, Canada

The 1980s Project: International Policy Issues of the Next Decade

A prescription for better ways of handling some of the important issues that are likely to become the subject of international contention in the next decade and beyond.

Patsy Gesell, assistant to the executive director, Council on Foreign Relations, New York, New York

International Resources

A look at creativity in problem solving for middle and top management, using global perspectives and examples with audience participation for a "come think with me" session.

Bernard B. Goldner, professor of management, La Salle College, Philadelphia, Pennsylvania

Commercial Space Transportation Public Policy Issues

An evaluation of the role of private enterprise in the financing and operation of commercial space transportation services.

William Good, president, Earth Space Transport Systems Corporation, New York, New York

Increased Conflict in Western Management in This Decade

Exploration of trends in management, growth of the "management elite," shifting values, increasing conflict between staff and management, frustration, stress and escapism.

Carol J. Gradenwitz, president, Gradenwitz Management Services, Inc., Toronto, Ontario, Canada

The Next Seventy Years: Population, Food, and Resources

Presentation on the present and future relations between human numbers, agricultural resources, dietary patterns, and economic development.

Bernard Gilland, civil engineer, Espergaerde, Denmark

Our Souls: Basic Fuel for a Revolutionary Future

A consideration of the part spiritual values and visionary energies must play in a world widely dominated by materialism.

Miguel Grinberg, director, Contracultura Center, Buenos Aires, Argentina

Emerging Trends in the Organization of Society Which Will Have Impact on the Form of Human Settlement

Presentation of alternative development forms for the central city and the adaption of the smaller city and town to increased growth in appropriate forms.

A. J. Diamond, architect and planner, A. J. Diamond Associates, Toronto, Ontario, Canada

Mrs. Kevin Garland, urban planner, A. J. Diamond Planners, Ltd., Toronto, Ontario, Canada

Hedging Against Future Shock for Companies

Some businessmen confuse hedging with speculation, whereas they are actually opposites. Yet price risk reduction can be accomplished via hedging. That is the rationale behind the process—a means of reducing risk by either forward (future) sales or forward (future) purchases of the required or related commodity future for a particular business operation.

Mark Zeller, account executive, Dean Witter Reynolds, Inc., New York, New York



Hedging Against Future Shock for Individuals

The primary purpose of a commodity futures market is to assist in the orderly marketing and distribution of agricultural products and raw materials. Businessmen who produce, process, and market various commodities establish positions in futures markets to protect their inventories and forward sales against adverse price fluctuations, through an economic process called hedging.

Mark Zeller, account executive, Dean Witter Reynolds, Inc., New York, New York

The Human Energy Crisis

There exists a "human energy crisis" evident in decreased productivity while population increases. A new process, enhanced by the collective genius of participants, would demonstrate some new models for increased productivity and increased self-esteem of persons using meetings to produce important products.

Larry E. Webb, organizational development consultant, HSD Associates, Orlando, Florida

Michael J. Murray, organizational development consultant, Arlington, Texas

Critical Relationships Between Energy, Capital, and Knowledge: The Future Pathways of the International Community

Presentation on the crisis facing the global community.

Bruno Fritsch, professor, Center for Economic Research, Swiss Federal Institute of Technology, Zurich, Switzerland

Zeitgeist Communication

Examination of a new field which is concerned with communicating ideas across and upward in organizations and society rather than downward as with most other media.

Richard J. Spady, United Methodist layman, consultant, president, Forum Foundation, Seattle, Washington

Future Leisure Environments in Cities

Session on the important links between the quality of life and environment in cities, leisure, life-style, energy, open space, and urban planning.

Seymour M. Gold, associate professor of environmental planning, University of California, Davis, California

Population Control and Public Policy in China

For population control to be effective, public policy implementation must permeate every aspect of life and society.

Harvey Wolf, associate professor of public administration, College of Arts and Sciences, West Virginia University, Morgantown, West Virginia

How to Go With the Evolutionary Flow: Why Some Minds Embrace the Future While Others Resist

The mind's evolutionary fast-growth system unfolds in flowing mastery when its signals are accurately interpreted and used. Unfortunately, movement can get blocked by an obscure paradox that comes from the divergent methods for physical survival and consciousness evolution. This and other dilemmas will be described and mastery solutions will be offered.

R. Duncan Wallace, president, Utah Psychiatric Association; Certainty, Inc., Salt Lake City, Utah

Money in the Future

An introduction to value relativity theory, and its possible application in designing an international monetary system in relation to global perspectives.

Steve Wowchuk, specialist in the field of value relativity, Mississauga, Ontario, Canada

The Temple of High Technology: Can It Materialize?

New technological advances depend as much on the ability to obtain investment capital and develop a sound operating organization as they do on scientific revelations. Discusses how the venture capital process will indicate just what kinds of new technologies are likely to establish themselves in the future.

Richard Worzel, chartered financial analyst, IF Research, Toronto, Ontario, Canada

Public Affairs Forecast and the Work of the Institute

Promotion of a dialogue between corporations, foundations, government, and the voluntary sector.

Richard A. Hopkinson, president, Institute of Donations and Public Affairs Research, Montreal, Quebec, Canada

Values and Preference Forecasting

Presentation on the current state of the art in values and consumer preference forecasting, including a discussion of major theories and a review of basic methods used by futures researchers and corporate planners.

Paul Hall, graduate student, University of Houston, Clear Lake City, Texas

Post-Industrial Ruralism

Presentation and evaluation of a long-term social experiment that has been going on in an economically depressed rural area in British Columbia.

Linda Herrero, teacher, environmental design, University of Calgary, Calgary, Alberta, Canada

Stephen Herrero, professor, environmental design, University of Calgary, Calgary, Alberta, Canada

Politics of Post-Industrial Society: Implications of Current Models

Presentation based on research in the implications of the coming post-industrial society for government and public bureaucracy.

Benjamin Hourani, professor, political science, Eastern Michigan University, Ypsilanti, Michigan

Global Love, Local Compassion

An experimental workshop on inner peace and outer peace grounded in the global heritage of Oriental Spirituality.

Swami Deva Hanso, business professor, Rajneesh Center, Birmingham, Michigan

Semantic Indicators of Orientations Toward the Future

The basic proposition of this discussion is that our patterns of talk influence both our expectations about the future and our adaptations to it. This paper suggests some changes in language habits that would make it easier to both understand and invent the future of our choice.

William Conboy, professor, speech communications and human relations, University of Kansas, Lawrence, Kansas

Paper Fair

Contributed papers not selected for presentation at concurrent sessions can be presented at a "paper fair" to be held in a major room. Here presenters will have the opportunity to take on all comers and discuss their ideas, concepts, and proposals with individuals on a one-to-one basis or with small groups on an informal basis. Place and time of the "paper fair" will be announced at the conference registration.

Church Development in the 1980s

If we make our plans for the 80s on the basis of the 60s and 70s assuming as we did in 1960 that we can predict the future on the basis of the past, we will likely be as wrong this time as we were that time. The future will be different and in ways surprising to many of us.

Douglas A. Walrath, church development consultant, independent, minister, Reformed Church in America

Island for Science

New and future advances in open-ocean mariculture, solar desalination, wave power, ocean thermal energy conversion, and other interdisciplinary innovations which will be undertaken on an island in the Bahamas will be described.

Neil P. Ruzic, president, Island for Science, Inc., formerly president of Industrial Research, Beverly Shores, Indiana

The Future of Man

Threats to the American economy through declining labor productivity, high energy costs, high interest and mortgage rates, heavy defense expenditures, taxation, and inflation will be the focus of this discussion.

Roger Gupta, associate professor, Administrative Sciences Department, Kent State University, Kent, Ohio

Images of the Future Held by the Aging

Discusses an examination of the various ways in which the older members of our society tend to perceive the future.

William Conboy, professor, speech communications and human relations, University of Kansas, Lawrence, Kansas

Janusz Korczak: The Educator's Futurist

A tribute to the renowned Polish medical doctor-writer-educator-innovator who had formulated a methodology of child upbringing in the 20s and 30s which may well have been a harbinger of the future.

Edwin P. Kulawiec, professor of education, George Washington University, Washington, D.C.

A Model for Citizen Participation in Community Futuring and Action Designs

A report-workshop on work with seventy-five cities, involving key power figures and citizen networks in futuring and action planning.

Ronald Lippitt, professor emeritus of sociology and psychology, University of Michigan, Ann Arbor, Michigan

Eva Schindler-Rainman, community consultant, Hilltop Associates, Los Angeles, California



Fostering Personal and Professional Growth: A Model and Activities

This workshop will look at personal/professional/organizational growth issues, the role of values in rational decision making, and linking personal and professional goals.

Robert J. Snaveley, staff development director, Kohler Public Schools, Kohler, Wisconsin

Ann Washington, director of programs for gifted and talented students, Norfolk Public Schools, Norfolk, Virginia

The Societal Impact of Expected Future Trends in the Dental Health Sector

The impact of changes in dental workforce distribution, specialist/generalist requirements, dental health insurance providers, auxiliary utilization, and postdoctoral specialist/generalist training and finance will be discussed.

S. Miles Standish, associate dean, Graduate and Postgraduate Education, Indiana University School of Dentistry, Indianapolis, Indiana

Developing Visual Capabilities for Better Human Equilibrium

A presentation offering ideas and methods on acquiring better visual abilities and increased sensibilities, complimenting analytical capabilities.

Vello Hubel, industrial engineer, Vell Hubel Designs, Toronto, Ontario, Canada

The Life-Extension Revolution

A synthesis of the latest biomedical advances and ideas relating to life extension.

Saul Kent, life extension activist and author, Woodstock, New York

This Is Tomorrow: The Art and Science of Developing the Whole Child

An examination of the child of the twenty-first century who must be self-disciplined, confident and cooperative, and realize his self value as well as that of his fellow man and the intrinsic need to be interdependent.

Gwen Neser, associate professor of education, Monmouth College, West Long Branch, New Jersey

Entrepreneurship, Corporations, and Society in the 1980s

A look at the new entrepreneurship: a desire for responsibility, freedom from bureaucracy, and control, as well as for recognition and rewards.

Randy Bennet, corporate issues analyst, Human Resources Network, Philadelphia, Pennsylvania

INSTITUTIONAL PRESENTATIONS

Organizations that are active in the futures field have been invited to discuss some futuristic aspect of their activities. The objective of this feature of the program is to provide insights into what commitments these organizations have made to the futures field, and how. Some of the presenting organizations will provide forecasts for the 1980s and beyond.

Academy for Educational Development

New York, New York

Alvin C. Eurich, president

Battelle Memorial Institute

Columbus, Ohio

H.R. Hamilton, manager, Economics Planning

John M. Griffin, staff associate

James R. Huntley, head, Advanced Internal Systems

Alvin M. White, associate manager, Business Planning

The Center for Futures Research, University of Southern California, Los Angeles, California

Burt Nanus, director

Selwyn Enzer, associate director

Wayne Boucher, senior research associate

Richard Drobnick, research associate

Center for the Study of Social Policy, SRI International

Menlo Park, California

Willis Harman, associate director

Peter Schwartz, program manager

Forecasting International, Ltd.

Arlington, Virginia

Marvin J. Cetron, president

The Futures Group, Inc.

Glastonbury, Connecticut

Theodore J. Gordon, president

Institute for the Future

Menlo Park, California

Roy Amara, president

Robert Johansen, senior research fellow

Andrew Lipinski, senior research fellow

Predicasts, Inc., Cleveland, Ohio

Samuel A. Wolpert, president

The Resource Policy Center

Dartmouth College

Hanover, New Hampshire

Dennis Meadows, director

CONFERENCE SCHEDULE — TUESDAY, JULY 22, 1980

8:30 a.m.-10:00 a.m.	10:30-12:00 a.m.	12:30-2:00 p.m.	2:30-4:00 p.m.	4:30-6:00 p.m.	6:30-7:00 p.m.	7:15-7:45 p.m.	8:00-9:30 p.m.
1105 HUMAN From Limits to Choices 1204 FOOD Life-Style and Nutrition 1310 HAB Habitat: Public Policy 1403 HEALTH Wellness Skills for 80's 1404 HEALTH Faces of Mental Health 1504 VALUES Values for the Future 1603 ART Creative Leisure Goals 1703 TRNFOR Experiential Techniques 2102 RES Environment Impacts 2204 ENERGY Renewable Energy 2303 FRONT Military in Space 2403 TECH Science in the Third World 2504 INFO Personal Computers 2505 INFO Conferencing 2603 ENVIR Search Conference 2604 ENVIR Harmony in Biosphere 2702 POP International Migration 3104 S&I Impetus to Change 3207 EDUC Education and Society 3323 METH Social Inventions 3324 METH Strategic Performance 3402 CAREER Inventing Your Own Job 3404 CAREER Participative Option 3503 BUS Co-operatives (I) 3602 ECON New Economics 3705 GOV Citizen Participation	1106 HUMAN Hispanics 1107 HUMAN Women 1205 FOOD Climate Strategies 1403 HEALTH Wellness Skills for 80's 1404 HEALTH Faces of Mental Health 1303 HAB Fantasies into Realities 1603 ART Creative Leisure Goals 1703 TRNFOR Experiential Techniques 1505 VALUES Religion in the 80's 2205 ENERGY Conservator Society 2304 FRONT Earthkind to Spacekind 2406 TECH Future Jobs, Social Roles 2506 INFO Computers in the Office 2703 POP World: Aging and ZPG 2603 ENVIR Search Conference 2604 ENVIR Harmony in Biosphere 3105 S&I Transition and Society 3208 EDUC Introducing the World 3209 EDUC Teaching for the Future 3306 METH Self-fulling Prophecy 3326 METH Research Then and Now 3506 BUS Managerial Ability 3706 GOV Anticipatory Democracy 4007 GEN European Futures Research — INST Academy for Educ. Dev.	KEYNOTE LUNCHES Dissecting the 'Declining Productivity Flap' Hazel Henderson, co-director, Princeton Center for Alternative Futures The Third World: Threat or Promise? Lewis Perinbam, vice-president, Canadian International Development Agency	1108 HUMAN Status and Power 1210 FOOD Farming Systems 1304 HAB Recycling Cities 1405 HEALTH Responsibility for Health 1506 VALUES Ethics and the Future 1602 ART Theater in the 80's 1704 TRNFOR Entering the New Age 2104 RES Global 2000 Report 2206 ENERGY Eco-Dynamics 2305 FRONT The Next Billion Years 2405 TECH Fire in a Dark World 2605 ENVIR Third World Environment 2704 POP Reproduction Research 3106 S&I Extraterrestrial Contact 3210 EDUC Science Fiction 3211 EDUC Arts in Education 3304 METH Influence of Assumptions 3307 METH Issues Management 3405 CAREER Third World Brain Drain 3505 BUS Consumerism 3603 ECON Cycles 3707 GOV Authoritarianism's Faces	1109 HUMAN Cultural Settings (I) 1113 HUMAN Family Issues 1209 FOOD North-South Dialogue 1305 HAB Steady-State Habitat 1507 VALUES Meeting of East and West 1608 ART New Modes and Games 1708 TRNFOR Aquarian Conspiracy 2207 ENERGY Commons-Energy 2306 FRONT Oceans: Research Visions 2407 TECH Technology Assessment 2507 INFO Collective Wisdom 2606 ENVIR Garbage Dumping 2705 POP Slow Population Growth 2603 ENVIR Search Conference 3107 S&I Social Transformation (I) 3213 EDUC Young Futurists 3214 EDUC Changing Values 3212 EDUC No Limits to Learning 3309 METH Social Indicators 3310 METH Role of Ritual 3406 CAREER Quality of Working Life 3504 BUS Co-operatives (II) 3709 GOV International Governance 4008 GEN The International City 4009 GEN Metaperspectives		IDEA EXCHANGE IDEA EXCHANGE IDEA EXCHANGE	1110 HUMAN Cultural Settings (II) 1111 HUMAN Living More Modestly 1402 HEALTH Effects of Health Care (II) 1508 VALUE Transformation of Nature 1613 ART Arts and the Community 1702 TRNFOR A Teilhardian Liturgy 2208 ENERGY Energy and Conflict 2408 TECH New Technologies Impact 2508 INFO Data: Public or Private 3107 S&I Social Transformation (II) 3215 EDUC Evolutionary Futurism 3216 EDUC Futures Planning 3311 METH Focused Planning 3328 METH Both Sides of the Brain 2603 ENVIR Search Conference (V) 3407 CAREER Future of Professions 3515 BUS Institutional Innovation 3518 BUS Future of Manufacturing 3611 ECON Latin America 3704 GOV Biology and Government 4010 GEN Future Creativity 4011 GEN Before the Cockroach — INST Resource Policy Center

CONFERENCE SCHEDULE - WEDNESDAY, JULY 23, 1980

8:30 a.m.-10:00 a.m.	10:30-12:00 a.m.	12:30-2:00 p.m.	2:30-4:00 p.m.	4:30-6:00 p.m.	6:30-7:00 p.m.	7:15-7:45 p.m.	8:00-9:30 p.m.
1112 HUMAN Ethnotronic Impacts 1206 FOOD Commons: Food 1306 HAB Changing Technology 1406 HEALTH Health Methodologies 1407 HEALTH Cybernetic Medicine 1509 VALUES Science and Religion Gap 1610 ART Filmmaking in the 80s 1705 TRNFOR Evolutionary Potential 2209 ENERGY Beyond Physics 2307 FRONT Role of Polar Regions 2409 TECH Appropriate Technology 2509 INFO Third World Problems 2510 INFO Need of Communications 2607 ENVIR Environmental Quality 3108 S&I Peace-Violence Transition 3219 EDUC University Needs 3312 METH Scenarios as a Tool 3313 METH Policy Impact Analysis 3408 CAREER Your Future Career 3409 CAREER Labor Organization 3517 BUS Developing Managers 3605 ECON Inflation 3710 GOV Paradigm Shift — INST SRI International	1114 HUMAN Human Dialoguing 1206 FOOD A/T for the 3rd World 1307 HAB Settlement Strategies 1408 HEALTH Increasing Intelligence 1510 VALUES After Einstein 1607 ART Future of Dance in 80s 2106 RES Resource Information 2210 ENERGY Energy and Communications 2307 FRONT Long-Range Goals 2410 TECH Robotic Futures 2511 INFO Effects of Video Market 2611 ENVIR Transborder Pollution 3109 S&I Common Goals Renewal 3217 EDUC University Programs 3220 EDUC Educational Technology 3314 METH Utopias and Ideologies 3410 CAREER Work and the Family 3508 BUS World Markets 3606 ECON Market Forecasts 3612 Economics International Financial Flows 3711 GOV Back to the Basics	KEYNOTE LUNCHES The Information Age Willis Harman, associate director, SRI International Global Opportunities for Business Orville Freeman, president, Business International Corporation	1115 HUMAN Seniors as Futurists 1207 FOOD Producing Food in Canada 1308 HAB Housing in India 1312 HAB Habitat: Public Policy 1409 HEALTH Evolving Health Care 1511 VALUES Quest for Global Values 1609 ART The Future of Leisure 2211 ENERGY Conservation 2212 ENERGY High Technology 2411 TECH Concepts of Space, Time 2512 INFO Information Inventions 2513 INFO Ethnotronic Systems 2608 ENVIR Commons: Environment 2706 POP Growth Control in Asia 3110 S&I Change and Life-Styles 3221 EDUC Anticipatory Leadership 3222 EDUC Emerging Issues 3315 METH Measuring Attitudes 3316 METH Futures Analysis 3317 METH Future of Future Studies 3411 CAREER Blue Collar Futures 3501 BUS Creative Management 3607 ECON Time of Constraints 3712 GOV Research in Legislatures — INST Predicasts, Inc.	1116 HUMAN Gruppo Futuro 1208 FOOD Waste Exchange 1309 HAB Community Goals 1512 VALUES Spirituality of Indians 1612 ART Future of Music in 80s 2103 RES Disappearing Species 1706 TRNFOR Time of Healing 2213 ENERGY Values & Energy Decisions 2412 TECH Innovation—The Enemy 2514 INFO Information Utilities 2609 ENVIR Satellite Scanning 3111 S&I New Age Politics 3114 S&I Canada: Next 50 Years 3223 EDUC International Relations 3224 EDUC Educating Businessmen 3318 METH System Dynamics 3412 CAREER Alternative Schedules 3507 BUS Stakeholder 3509 BUS Corporate Futurism 3608 ECON World Is Your Oyster 3713 GOV Future of Federalism 4015 GEN Oral Communications (I) — INST Cfr. Futures Research	IDEA EXCHANGE IDEA EXCHANGE	IDEA EXCHANGE	1117 HUMAN Ethnographic Research 1118 HUMAN Future of the Family 1316 HAB North America 1990 1410 HEALTH Diseases in the Third World 1513 VALUES Religion in the Future 2214 ENERGY A/T for Energy 2413 TECH The Seed Imperative 2515 INFO Future of Media Ecology 2516 INFO Future in Communications 3112 S&I Increasing Man's Energy 3218 EDUC Household Energy Use 3225 EDUC Increased Public Service 3228 EDUC Teaching Futures in K-12 3319 METH Evaluation and Public Policy 3325 METH Emergent Paradigm 3321 EDUC Anticipatory Leadership 3413 CAREER Trends in the Workforce 3510 BUS Credo for MNC's 4015 GEN Oral Communications (II)

CONFERENCE CO-SPONSORS

World Future Society

The World Future Society is an association of people who are interested in how social and technological developments will shape the future. It is chartered as a nonprofit scientific and educational organization in Washington, D.C., U.S.A.

The Society was founded in 1966 by a group of private citizens who felt that people need to anticipate coming developments to make wise personal and professional decisions. In our turbulent era of change, the Society strives to be an unbiased and reliable clearinghouse for a broad range of scholarly forecasts, analyses, and ideas.

As outlined in its charter, the Society's objectives are:

1. To contribute to a reasoned awareness of the future and of the importance of its study.
2. To advance responsible and serious investigation of the future.
3. To promote the development and improvement of methodologies for the study of the future.
4. To increase public understanding of future-oriented activities and studies.
5. To facilitate communication and cooperation among organizations and individuals interested in studying or planning for the future.

Canadian Association for Futures Studies

The Canadian Association for Futures Studies (CAFS) was founded in 1976 as a nonprofit membership association—sometimes referred to as the Canadian Futures Society—and is now one of the world's leading Futures groups.

The objective of CAFS is to encourage futuristic thinking among Canadians individually and collectively; and to provide a vehicle for Canadians to recognize exciting opportunities for shaping Canada's future in the global context.

CAFS thus aims to encourage initiatives, involved dialogue and action to bring about appropriate alternative futures. CAFS identifies and encourages study of major trends in Canada and abroad, in terms of their future implications and the environments and actions necessary to sustain and enhance the Canadian future. We monitor and report on social trends and the various future-oriented activities of Canadians and report on these events to our members, to Canadian decision-makers and to the public at large.

CONFERENCE SCHEDULE — THURSDAY, JULY 24, 1980

8:30 a.m.-10:00 a.m.	10:30-12:00 a.m.	1:30-2:45 p.m.	3:00-5:00 p.m.
1119 HUMAN Systems Thinking 1211 FOOD Capital and Food 1313 HAB Urban Revitalization 1411 HEALTH Models-Health Science 1514 TRNFOR Reawakening of Eve 1611 ART Mass Attractions 2215 ENERGY Priorities-Energy Plan 2415 TECH Appropriate Tech. 2516 INFO Collapse-Vertical Integ. 2610 ENVIR Solid Waste-Global 3113 S&I Responsible Security Sys.	1120 HUMAN Problems & Scarcity 1314 HAB Non-Verbal Habitat 1606 ART Work and Leisure 1707 TRNFOR Co-creation 2216 ENERGY Planning-Dev. Countries 2218 ENERGY Clean Energy 2309 FRONT Space Industrialization 2517 INFO Int. Info Flow 2612 ENVIR Nuclear Waste Storage 2707 POP Pop., Rights, Politics 3229 EDUC Designing Criteria 3230 EDUC Appropriate Education 3320 METH Int. Political Risk 3327 METH Changing Values, Workforce 3609 ECON Economies of Change	1315 HAB Wrap Up Session 2217 ENERGY Energy Summary 3513 BUS Opportunities Workshop 4019 GEN Commons: Proposals 3415 CAREER What is Work? 3512 BUS Corporate Images 3714 GOV Strategic Planning 4018 GEN Commons: Getting There — INSTI Institute for the Future	
			CLOSING PLENARY

EDUCATIONAL COURSES

An extensive series of specialized courses and seminars will be conducted just before and just after the conference. These will be offered for an extra fee, and attendance will be limited. In each case, there is a considerable price reduction for members of the World Future Society and the Canadian Futures Society. Early registration is advised, since the reputations of the faculty members suggest that the courses will fill up quickly. Handout materials will be included in the fee.

Pre-Conference Courses and Seminars

C-1. Teaching Futures

Given by the Education Section of the World Future Society to provide opportunities for people who want to teach about the future at all levels—pre-college, college, and corporate or community groups. Speakers and group leaders will be teachers who have had classroom experience leading future-oriented courses and people who have had experiences in non-traditional educational settings. Gary Wooddell and Geoffrey Fletcher, co-founders of the Milford (Ohio) Futurology Program, are the principle faculty. Other leaders of the seminar are: Thomas Carleton, co-director of Earthrise, Inc., and co-designer of the Global Futures Simulation Game; and

Penny Damlo, a well-known futurist educator who is currently Director of Education Services for Future Systems, Inc., Minneapolis, Minnesota, and president of the Minnesota Futurists. Provisions will be made for both beginners and experienced futurist educators. Beginners will get theory, background, forecasting, as well as curriculum ideas. More experienced futurist educators will have the opportunity to exchange ideas, receive new ideas in curriculum and forecasting, and hopefully counteract "futures burnout." The seminar will be participatory, not a rehashing of old ideas. New directions and new ideas will be explored. A two-day course. Registration will be limited.

Date: July 19-20, 1980

Cost: \$65 to WFS Members; \$75 to Non-Members

C-2. Futurics: Perceiving Things to Come

This is a two-day introduction to the orderly study of the future, including basic and intermediate analytical methodologies, and is designed for anyone interested, either at a beginning or intermediate level. In the opening session, "Introduction to Futurics," David Snyder will discuss course objectives, different ways of looking at the future, practical individual and institutional purposes for studying the future, and the limits of futurics. Next, the WFS orientation film, *Toward the Future*, will be introduced by Roy Mason. "The Delphi Survey" (with David Snyder) will

cover uses and abuses of the Delphi methodology, survey design techniques, and a Delphi exercise and feedback analysis. After lunch, four simultaneous expert sessions will be held: "The Future of Education" (with Gregg Edwards), "The Future of Habitats and Communities" (with Roy Mason), "The Future of Information and Information Technology" (with Richard Maynard), and "Future Life-Styles" (with David Snyder). The first day of the course will conclude with "Introduction to Futures Wheels," a future wheel exercise, and feedback from the exercise. On the second day, the four simultaneous sessions will be repeated, followed by "Survey of Futures Methodologies" (with Pam Kruzic), "Introduction to Scenarios" (with David Snyder, who will also coordinate the entire course) will be presented next and, after lunch, a scenario exercise, "Living Through the Eighties," followed by feedback from the exercise. A final summary session will cover networking and collaborating, practical applications of futurics, and planning for and acting upon the future. The faculty are all members of the Washington chapter of the World Future Society who have had considerable experience in practical futuristics and in presenting these ideas to varied audiences. Participants in this course will receive between 100 and 150 pages of handout materials, plus a deck of Scenario Cards. In addition, those registering prior to June 1 will participate in a futures Delphi survey to be analyzed during the course.

Date: July 19-20, 1980

Cost: \$95 to WFS Members; \$110 to Non-Members

C-3. The Responsibilities of Futurist Thinkers

A two-day course to be given by Bertrand de Jouvenel, the celebrated French social scientist who has been a European pioneer in the study of the future. In his youth, he was a close friend of H.G. Wells; in the 1960s, he established the pioneering futurist group known as *Futuribles*. One of his best-known books is *The Art of Conjecture*, now a classic of futurist literature. Fluent in both English and French, de Jouvenel is prepared to use both languages in his course.

Date: July 19-20, 1980

Cost: \$95 to WFS Members; \$110 to Non-Members

C-4. Values and the Future

A growing body of futurists see the re-creation of religious and spiritual values as central to our survival both in the imme-



diate future and in the long run. The first part of this seminar will deal with why religious and spiritual values are required in today's and tomorrow's conditions. The requirements for practicing honesty, responsibility, humility, and love in complex cultures will be explored, along with the transformation results. The rest of the two-day seminar will examine the implications of these necessary religious and systemic values for socioeconomic patterns, both internal and international. Among the subjects of discussion will be economics, education, health, the law, the relations between the rich and the poor countries, and other subjects that participants may want to raise.

Presentations and workshop exercises will be conducted under the leadership of well-known futurist writer Robert Theobald, who lives in small towns in both America and Scotland, but is able to work on regional and national scales using the teleconferencing potentials of the micro-electronic revolution. Theobald will draw on the parallels and contrasts between Arizona and Scotland to enrich the discussion. Print material will be circulated in advance to those who sign up early.

Date: July 19-20, 1980

Cost: \$145 to WFS Members; \$160 to Non-Members

C-5. Emerging Issues Identification: Fitting It Into the Planning Process

This two-day course will focus on trend assessment and its role in the strategic planning process. Instructors will be Arnold Brown, president of Weiner, Edrich, Brown, Inc., a New York City management consultant firm, and Lynne Hall, manager of Macro Market Analysis for AT&T. Emphasis will be placed on the growing importance of the external environment, speed and magnitude of change, the need for greater lead time, and the availability of new tools. Also examined will be qualitative and quantitative methods of issue identification and ways of integrating with Strategic Planning. Case histories will be presented, and there will be workshops devoted to applying external factors in different kinds of business, government, and academic organizations. Registration limited to 50.

Date: July 19-20, 1980

Cost: \$195 to WFS Members; \$210 to Non-Members

C-6. Technological Forecasting

This is a pragmatically oriented two-day course describing forecasting techniques and methods for integrating technological forecasting programs into business, government, and educational operations. The seminar will give participants sufficient instruction and practice to enable them to apply the basic T/F techniques—such as trend extrapolation, use of expert opinion,



monitoring, and substitution theory—and will provide, in addition, a foundation for future self-development in the field.

The instructors will be John Vanston, president of Technology Futures, Inc., a management educational and consulting firm in Austin, Texas, that specializes in technology forecasting and the management of technical innovation; James Bright, president of Industrial Management Center, Inc., North Edgecomb, Maine, and a specialist in technology management for more than 25 years; and Ralph C. Lenz, senior research scientist at the University of Dayton Research Institute and author of one of the earliest publications on technology forecasting. In addition to other material, each participant will receive a copy of Bright's book, *Practical Technology Forecasting*.

Date: July 19-20, 1980

Cost: \$195 to WFS Members; \$210 to Non-Members

Post-Conference Courses and Seminars

C-7. Early Warning Signals

Learn about a psychological-philosophical-practical system for introducing futures scanning to large and small organizations. Why are some people enthusiastic about long-range thinking, forecasting, goal setting, and imaginative speculation? And why do others resist practically all attempts to think about change? This two-day workshop will analyze in detail the factors that work for and against you as your organization's futurist. The instructors will reveal how to identify your natural colleagues and how to win them over to futurist thinking; how to neutralize your opponents; and how to instill in your organization an interest in the future.

The instructors are Jay S. Mendell and F. John Pessolano. Mendell, who has been

a corporate planner and product developer for 10 years, is editorial chairman of *Business Tomorrow* and visiting professor of business and public administration at Florida Atlantic University in Boca Raton, Florida. Pessolano, who is associate editor of *Business Tomorrow* and teaches at New York University, is the leading exponent of futures thinking among certified public relations counselors.

Carefully selected handout material will be distributed to registrants. An attempt will be made to accommodate all interested registrants on a first-come basis.

Date: July 25-26, 1980

Cost: \$195 to WFS Members; \$210 to Non-Members

C-8. Management for the 80s

Two prestige one-day seminar workshops will be held for management educators and ambitious executives who recognize that the successful methods of yesterday are no longer good enough. Participants will work in teams of seven and learn how to: gain a holistic awareness of the evolving organizational environment; understand the implications of the 1980s for key functional areas such as planning, research, personnel, administration, public relations, production, and marketing; develop improved creative and innovative ability; develop futuristic decision-making skills; integrate these skills to produce a dynamic new form of organization structure suitable for the 80s; and successfully apply "Harmonic Management"—a synergy of the sharpest techniques available for staffing, directing, and controlling the organization of tomorrow.

The seminar leader is Frank Feather, who is conference chairman and director-general, First Global Conference on the Future; editor, *Business Tomorrow*; and superintendent-domestic regions, Canadian Imperial Bank of Commerce. Each workshop will be restricted to the first 70 advance registrants.

Dates: (A) July 25, 1980
(B) July 26, 1980 (repeat of seminar A)
Cost: \$195 to WFS Members; \$210 to Non-Members

C-9. Advanced Methods in Futures Research

This two-day seminar will center on advanced methods of futures research currently employed by industry and government to accomplish various types of planning, forecasting, and policy analysis. The course will be conducted by The Futures Group of Glastonbury, Connecticut. Instructors will be Harold S. Becker, Executive Vice President & Treasurer, and John Stover, Manager, Analytic Services. The course will include preparation of material and instruction in the use of these various techniques and each day will include a workshop to allow the participants hands-on experience with one or more of the techniques. The involvement by the participants will result in on-site presentation of the results of their activities, e.g., by use of portable computer terminals and time-sharing services.

The first day will consist of three sessions: Session 1 will include an overview of planning, forecasting, and policy analysis techniques. This will include a definition of policy analysis, alternative approaches to accomplishing the various activities that support decision-making in industry and government and some pitfalls or shortcomings of alternative methods. Session 2 will describe various techniques, including approaches to trend extrapolation and ways of projecting and forecasting that are rooted in probabilistic, as contrasted to deterministic, approaches. The first day will conclude with a workshop for the participants centered largely on approaches to extrapolating trends probabilistically. The second day will continue with instruction on various methods, specifically those related to simulating complex systems and simulating decisions of government bureaucrats, industrial managers, and various interests operating in a "marketplace." The workshop on the second day will center on involving the participants in use of one or more of these simulation techniques, again using probabilistic ways of addressing the future. Instruction material will be available to the participants for their use during the meeting and for their retention after the activities.

The course is designed for a broad range of participants: those seeking instruction in the techniques to be covered, those already practitioners, and decision-makers seeking insight into various new approaches that others have and are currently exploiting to aid in decision-making and policy analysis.

Date: July 25-26, 1980
Cost: \$295 to WFS Members; \$310 to Non-Members

C-10. Public Policy Forecasting and Issues Management

Because of the steady onslaught of public-policy change, corporate planners need to be thoroughly grounded in public-policy forecasting and skilled in carrying out common-sense and effective issues management programs. This two-day instructional session covers practical means not just for identifying emerging issues but for influencing—and even directing—final outcomes. Each registrant will receive several comprehensive manuals, prepared exclusively for this course and including models, forecasts, charts, and much more.

The faculty for this course includes Graham T. T. Molitor, president of Public Policy Forecasting, Inc.; Marvin J. Cetron, president of Forecasting International, Ltd., a firm specializing in technological forecasting and assessment; and Jan V. Dauman, president of InterMatrix Group of London, England, specialists in international issues management and public policy analysis.

Date: July 25-26, 1980
Cost: \$295 to WFS Members; \$310 to Non-Members

C-11. Technology Assessment

This two-day short course and workshop will be a memorable experience that will change your view as to what you can do to more effectively manage technology—as a government official, as a corporate planner, as a public interest person, as a citizen. It will provide hands-on experience in conceptualizing technological issues and in the methodology, techniques, organization, management, and performance of a technology assessment.

What is technology assessment? It is a future-oriented policy study, directed at identifying all the implications of technological decision-making to inform decision-makers and others about choices and options. Technology assessment is a rapidly expanding policy tool in the United States, Canada, Germany, Great Britain, Japan, the Soviet Union, and Brazil.

The workshop will help those impacted by technology and technological change: officials in government and industry involved in research, management, and planning; think tanks and study groups; faculty and students in engineering, biological sciences, social science, humanities, business administration, and public administration; public interest groups; teachers; and lay people.

If you take this course, you will be introduced to the concept of technology assessment, the technological problematique, and contemporary difficulties in the management of technology. You will be exposed to—and apply—several of the major study techniques applicable and proved in technology assessment. You will engage in an extended workshop to fully acquaint you with the intellectual, methodological, management, organization, staff, and de-

livery problems of technology assessment. You will produce a document that you will carry away—and that will be of lasting value to you and your associates in orienting your thinking. You will acquire a salient collection of background materials, instructions, advisories, and other how-to-do-it material.

The principal instructor will be Joseph F. Coates, president of J. F. Coates, Inc., a micro-miniature think tank located in Washington, D.C. Formerly Assistant to the Director of the Office of Technology Assessment, U.S. Congress, Coates is a national and international authority on technology assessment, futures, and strategic planning. Henry H. Hitchcock will be the co-instructor. Formerly on the staff of the Program of Policy Studies in Science and Technology at George Washington University in Washington, D.C., he has had extensive experience in technology assessment, risk analysis, and public attitudes toward technology (nuclear power in particular), and has conducted short courses on technology assessment and space colonization.

Date: July 25-26, 1980
Cost: \$295 to WFS Members; \$310 to Non-Members

C-12. Promises of Practitioners vs. Expectations of Users: A Critical Look at Futures Planning and Research

Designed for experienced practitioners and consumers of futures planning, this one-day seminar/workshop will address three sets of basic issues: What has futures planning and research delivered that is making a difference? What criteria should be used to judge the quality and utility of the results of futures research? What are the principal conceptual and pragmatic issues that need to be tackled next?

The course will be taught by Roy Amara, president and senior research fellow at the Institute for the Future in Menlo Park, California, and Institute staff members Robert Johansen, Andrew Lipinski, and John Tydeman. Amara's research activities have included work on the future corporate environment, emerging societal issues, methodologies for long-range planning and forecasting, decision analysis, and the social impact of information generating, processing, and dissemination systems. Johansen's research interests have concentrated on communications research, evaluation research, and long-range planning, and he has taught courses or workshops in all of these areas. Lipinski is currently studying the impact of societal, economic, and regulatory changes on the future of large corporations. Tydeman's research activities have been directed mainly to the area of futures research and program evaluation.

Registration is limited to 50.
Date: July 25, 1980
Cost: \$295 to WFS Members; \$310 to Non-Members

GENERAL INFORMATION

Special Events

Pre- and post-conference seminars/courses/workshops

See page 53.

Exhibits

Future-oriented displays by businesses and other organizations will be featured.

Films

Films about the future will be shown continuously during the conference.

Book Display

Publishers are being invited to submit copies of all books dealing with the future for display.

"Meet the Author" Sessions

Special meetings will allow conference attendees to get acquainted with distinguished authors.

Manpower Exchange

A manpower exchange is planned to facilitate contacts between potential employers and persons interested in employment in the futures field.

Keynote Luncheons

Two series of three keynote luncheons have been arranged to take place on the first three days of the conference. There will be two luncheons each day on a concurrent basis—one at each of the conference hotels. The keynote luncheons are moderately priced. Separate ticket events will also be open to members of the local community on a first-come first-serve basis. Delegates who register for the conference will be given first choice of reserving a place for the luncheons by way of direct mail in advance of the conference. A full-course luncheon will be served followed by a provocative address by a prominent speaker as follows:

Monday, July 21

"The Future of the North-American Corporation" – by **Herman Kahn**, director, Hudson Institute

"The New Face of Global Politics" – by **Aurelio Peccei**, president, Club of Rome

Tuesday, July 22

"Dissecting the 'Declining Productivity Flap'" – by **Hazel Henderson**, co-director, Princeton Center for Alternative Futures, Inc.

"The Third World: Threat or Promise?" – by **Lewis Perinbam**, vice-president, Canadian International Development Agency

Wednesday, July 23

"The Information Age" – by **Willis Harman**, associate director, SRI International.

"Global Opportunities for Business" – by **Orville Freeman**, president, Business International Corporation

Receptions

Several receptions are planned to give conference attendees the opportunity to get to know each other.

WFS Chapter Activities Workshop

Conference participants who are interested in local activities of the World Future Society will be invited to a workshop describing ways of forming or strengthening a local chapter.

Study Tour

An all-day bus tour of solar energy activities in Toronto will be held on July 25, 1980. The stops will include: Ecology House, an example of super-insulated passive-solar retrofitting; an Esso truck wash that uses solar energy collectors; a tour of solar manufacturing facilities; Provident House, an early active solar house with seasonal storage; Natural Energy House (a passive solar house); a double-shell house; and an earth-sheltered (underground) passive solar house.

A Future Fair at Harbourfront

"Meeting the Future" will be the theme of a fair of futuristic events and exhibits that will take place July 21-25 outdoors at Harbourfront, an impressive redevelopment area stretching along the Lake Ontario waterfront only 1½ blocks from the Harbour Castle Hotel.

The Future Fair, which will serve to supplement the indoor exhibit area described elsewhere, will include:

Innovative Center

Featured will be innovative technologies, skills, and services which foresee the needs of the 1980s. Computerized games will be used to simulate complex social and economic environments within today's institutionalized setting, allowing players to solve global problems.

Cross-cultural Exchange

The exchange of information between local and international groups will be facilitated.

Future Theatre

Films, theatre, and other future-oriented entertainment will be featured throughout the week.

A variety of other cultural events are offered at Harbourfront, and most of them are free, including ballroom and square dancing, art exhibits, boat festivals, poetry

readings, jazz, Middle East music, unusual films, open sing-songs, an environmental sculpture show, a craft studio, and much, much more. Special events for senior citizens and for children are often scheduled, and two children's playgrounds, a picnic area, and a huge sports field are located at the western end of the development. Also at Harbourfront are the Canadian Railway Museum and the Weekend Summer Antique Market. Light meals may be purchased at a number of snack bars and restaurants on site. A program of events taking place during the conference week will be included in your conference kit.

For further information (including the costs of exhibit space), contact the First Global Conference on the Future, 1 Yonge Street, Suite #1701, Toronto M5E 1E6, Canada (phone 416-361-1080).

Social Program

An exciting social program consisting of sightseeing and other special activities and events is being put together for conference attendees. The events scheduled include:

Bus tours to Niagara Falls

A high priority on almost everyone's sightseeing list, this natural wonder of the world is only a few hours' drive from Toronto. Enjoy the breathtaking scenery, explore the city of Niagara Falls, and cap off the day with dinner in a fine restaurant overlooking the falls.



Niagara Falls

Harbor cruises and visits to Ontario Place

Tour the waterfront in a glass-topped boat, see the port facilities close-up, and learn about the history of the harbor islands. Visit Ontario Place, an impressive 96-acre park spread out over three man-made islands on Lake Ontario. Ontario Place boasts an 800-person triodetic-domed Cinesphere Theater, marinas, restaurants, nightclubs, and an enchanting children's playground (which features such irresistible attractions as the Earth Box Crawl, the Rope Net Climb, and more than a dozen water games).

Bus tours of the city and visits to the CN Tower

Among the many sights to be seen are the CN Tower, Ontario Place, the Ontario Science Centre, the Eaton Centre, the Provincial Parliament buildings, the University of Toronto, Casa Loma, the Canadian National Exhibition, the Royal Ontario Museum, High Park, Queen's Park, the old City Hall, the new City Hall, the waterfront, churches, historical landmarks, and distinctive residential areas. The CN Tower offers sightseeing from the highest observation deck in the world, an audio-visual presentation in the Tower's "Theatre in the Sky," and dining in the highest revolving dining room in the world. On a clear day, you can see for 75 miles, which means you can even see the spray rising from Niagara Falls.



Toronto Zoo

Walking tours

Tours range from a few hours to all day. In the downtown area, you can see Union Station, the CN Tower (only a block from the Royal York Hotel), the Toronto Stock Exchange, Simpson's department store, the new City Hall, Chinatown, the Art Gallery of Ontario, Kensington Market, the Metropolitan Toronto Library, Maple Leaf Gardens, the Provincial Parliament Buildings, the University of Toronto, Queen's Park, and the McLaughlin Planetarium. Uptown, you can walk through the main shopping and theatre district, including the impressive and very expensive Yorkville area.

Electric streetcar tour and Chinese food reception

Take a leisurely sightseeing tour on one of Toronto's quaint streetcars, followed by an enjoyable reception featuring delicious Chinese food.

Moonlight cruises

Spend an evening on Lake Ontario aboard a glass-topped boat, cruising through the Island lagoons and stopping at Ontario Place for dinner and a breathtaking film presentation on the world's largest indoor screen.

Picnic on Centre Island

The island is the most popular section of the Toronto Islands, a large park on Lake Ontario. You can cook on an open-fired barbecue, rent a bicycle or canoe to explore

the islands, play tennis, attend a puppet theatre, or stroll through the formal gardens. There is also an amusement area for children.

Stratford Theatre Night

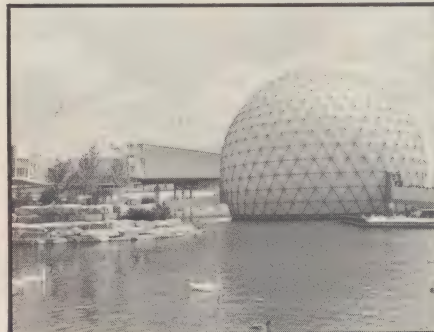
Take in a play at the Stratford Festival Theatre, which specializes in Shakespeare's plays and has, in fact, presented all but one of them in the 23 years since it opened. Stratford is a charming small town in southern Ontario, a few hours' drive from Toronto.

Shaw Festival Theatre Night

See one of George Bernard Shaw's plays performed at the beautiful contemporary



Casa Loma



Ontario Place Cinesphere

Shaw Festival Theatre, located in Niagara-on-the-Lake, considered by many to be the most appealing small town in Ontario.

Science Centre banquet

The Ontario Science Centre is a new \$30 million complex that is so different from traditional museums that it has been called a "museum of the twenty-first century." The museum has over 500 exhibits, and most of them are designed to allow "audience participation," which has made the museum extremely popular with children. This special event features exclusive use of all exhibits and facilities, a cocktail reception and buffets, dancing, and entertainment.

Information about the dates, times, and prices of the preceding events is expected to be available in May.

Those wishing to plan their own activities or obtain further information about some of the tourist attractions listed here may write to: Convention and Tourist Bureau of Metropolitan Toronto, Toronto Eaton Centre, 220 Yonge Street, Box 510, Toronto, Ontario M5B 2H1, Canada (phone 416-979-3133). Information about touring beyond the Toronto area can be obtained from: Canadian Government Tourist Office, 150 Kent Street, Ottawa, Ontario K1A 0H6, Canada.



Floating Floor, Children's Village, Ontario Place



Ontario Science Centre

Child Care

Daytime child-care will be provided at the Harbour Castle by Convention Child Care Service, run by experienced and reputable child-care specialists. The cost of the service is \$2.00 per hour for preschool children (infants to age 5) and \$1.50 per hour for school-age children (ages 6-13). For the five days of the conference (eight hours per day), this works out to \$80 per preschooler and \$60 per school-age child. The fee includes provision of lunch and two snacks each day, field trips, and all other supplies and expenses (e.g., diapers, art supplies, bedding, etc.).

The service features planned and supervised group and individual activities; approved quality equipment and play materials; and arrangements made for infants and children on restricted diets. Evening care for the children can also be provided.

Special Youth Program

A special youth program for young people between 12 and 18 years of age is in the planning stage. A number of sessions will



be arranged in which young people will have the opportunity to play futures games, learn about futuristics, and discuss the world they will inhabit as adults. The program will be run by teachers experienced in teaching about the future and able to work with a variety of age ranges. The registration fee for this special youth program will be \$30 per student.

The Think Bowl

One of the activities planned for youth is the "think bowl," a future problem-solving competition open to teams of elementary and secondary school students. Each team consists of four students drawn from similar grade levels (i.e., K-2, 3-6, 7-8, 9-10, 11-12). The competition will last one day, and will consist of stages of future problem-solving in which each team is given a problem scenario and then required to identify the core problems, brainstorm alternative solutions, decide on implementation strategies for solutions, and sell the idea. Teams interested in participating should contact Phil Dewan or Ted Runions, First Global Conference on the Future, 1 Yonge Street, Suite #1701, Toronto M5E 1E6, Canada (phone 416-361-1080).

Other activities for young people, including cultural tours, may be arranged for an additional charge.

Exhibits

Inventing the 1980s

A special exhibit area will be provided for the display of a wide variety of social and technological inventions that could have a significant impact on society in the 1980s and beyond. An attractive and professional exhibit area is seen by the organizers of the First Global Conference as the place where creative people can meet to exchange ideas and explore the use of information and technology. Exhibits are expected on transportation, natural resources, space, urban planning, leisure, work, housing, education, health, food, information, and information technology.

The cost of a standard 8' x 10' exhibit space is \$500, with a special reduced rate of \$250 available to non-profit organizations. Prospective exhibitors should complete the Exhibits Registration Form below and send it to: Richard G. Maynard, Exhibits Coordinator, World Future Society, 4916 St. Elmo Avenue, Washington, D.C. 20014, U.S.A.

Exhibits Registration Form

1. Name _____
2. Organization _____
3. Address _____

- Phone—Home: _____
Work: _____
4. Type of exhibitor and costs* (check one)
☐ Organization for Profit—\$500
☐ Non-profit organization—\$250
 *Standard exhibit space is 8' x 10'
5. Description of Exhibit.
 Provide written description of exhibit and, if possible, a photograph of the exhibit (as well as any special requirements).

Conference Volume

Persons paying the full registration fee for the conference will receive a volume of papers by conference participants and other futurists. The volume takes the theme of the conference for its title—*Through the 80s: Thinking Globally, Acting Locally*. It is being edited by Frank Feather, the Conference Chairman, in collaboration with an editorial board headed by Howard F. Didsbury, Jr., professor of history and executive director of the Program for the Study of the Future at Kean College of New Jersey.

The volume is expected to have about 375-400 pages and include approximately 50 papers. The authors are expected to include Isaac Asimov, Willis Harman, Aurelio Peccei, Herman Kahn, Alvin Toffler, Lester R. Brown, Harlan Cleveland, Elisabeth Mann Borgese, Maurice Strong, Joseph Martino, and many others. Topics focus on the future of such different areas as energy, consumerism, Europe, population, health, adolescent values, families, communications, creativity, employment, ethics, etc.

Corporate Sponsors

Dozens of corporations, associations, and government agencies are serving as co-sponsors of the First Global Conference on the Future.

Corporate Sponsors, in return for their \$1,000 contribution to the conference, receive the following special benefits:

- Up to five executives of the sponsoring corporation may attend the conference free of charge.
- A special reception will be arranged for Corporate Sponsors, with opportunities to meet leading futurists.
- Corporate Sponsors will be credited in the conference program, proceedings, and publications.
- Preferential treatment will be accorded in obtaining exhibit space, sponsorship of specific conference sessions, and other promotional opportunities.

Corporations already serving as Corporate Sponsors are:

- Alcan Canada Products Ltd.
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- General Motors of Canada Limited
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- Rothman's of Pall Mall Canada Limited

- Royal Bank of Canada
- Shell Canada Ltd.
- Torstar Corporation
- Trizec Corporation Limited
- Sun Oil Company of Canada Limited
- Wood Gundy Ltd.

The conference organizing committee welcomes additional corporate sponsorship. If your company wishes to contribute to the success of what could be the most important conference of the decade, please contact:

Richard G. Maynard
World Future Society
4916 St. Elmo Avenue
Washington, D.C. 20014, U.S.A.
301/656-8274

For Further Information:

In the U.S.A.:

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Telephone: 301/656-8274

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Futures Fair Coordinator	Ted Runions

Travel Information

By Air:

Toronto International Airport is served by all major international airlines. Bus transportation or limousine service from the airport to the Harbour Castle and Royal York Hotel is available. The duration of the trip is about 30 minutes, and costs \$3.50 per person for the bus transportation, and about \$15.00 per car for the limousine service.

Group fares, excursion fares, and other discount plans are available. Many local chapters are arranging for the members from their area to travel together. Contact the airline of your choice for further information.

From the United States:

American Airlines—with connections from Chicago, Dallas/Fort Worth, New York, Washington, D.C.

Telephone: 800-433-1790
(toll-free within U.S.)

Eastern Airlines—with connections from Atlanta, Miami, Philadelphia

United Airlines—with connections from Chicago, Denver

U.S. Air—with connections from Buffalo, Philadelphia, Pittsburgh

From Outside the United States:

Air Canada

CP Air

By Rail:

Rail service to downtown Toronto is provided by Via Rail from most Canadian and some U.S. cities (New York via Buffalo, and Detroit via Windsor).

Union Station is in the heart of downtown, near the Harbour Castle and the Royal York Hotel.

By Bus:

Economical bus transportation to Toronto is available. The central bus terminal is 15 minutes by public transportation from the conference hotels.

Within Canada:

Gray Coach has bus routes from most Canadian cities.

From the United States:

Greyhound and Trailways provide service from major cities via Buffalo, Montreal, and Detroit.

By Car:

Conference attendees who plan to drive may write to the provincial government for a free information package, containing road map, accommodations and camping guides. Address requests to Convention Services, Ontario Ministry of Industry and Tourism, Queen's Park, Toronto, Ontario M7A 2E5, Canada.

A valid driver's license from any country is good in Ontario for three months. If driving across the border, bring the vehicle registration forms. If driving a borrowed car, bring a letter from the owner, and if

you are driving a rented car, a copy of the rental contract. Ask your insurance agent for a Canadian Non-Resident Insurance Card.

Passports and Visas:

A passport or visa is not necessary for a U.S. citizen, but proof of citizenship may be required. A birth certificate or voter's registration card is adequate. Registered aliens residing in the United States must have their Alien Registration Cards.

Hotel Information

Two hotels are now being used as official hotels for the conference—the Harbour Castle and the Royal York—and special rates are available at both hotels for conference attendees.

The Harbour Castle, the main site of the conference, is Toronto's most luxurious hotel and the largest hotel-convention center in Canada. A downtown waterfront hotel, the Harbour Castle consists of two modern 35-story twin towers containing 983 spacious rooms and suites, all of which provide a spectacular view of Lake Ontario and the peaceful Toronto Islands.

The Harbour Castle provides a free mini-bus shuttle service that makes a circuit through the downtown area every 15 minutes, stopping at Union Station, the downtown airline terminal, business and financial centers shopping areas, and City Hall. The Toronto Islands ferry terminal is directly in front of the hotel. Tours to attractions in and around Toronto, and throughout Canada, may be arranged at the hotel's tour and travel desk.

The Royal York, the other official hotel for the conference, is in the heart of downtown Toronto and is the largest hotel in

the British Commonwealth. Its 1,600 soundproof, air-conditioned rooms are equipped with private bath and shower, telephone, radio, and color TV with in-house movies. Children under 14 can stay in their parents' rooms at no additional charge. This imposing 20-story traditional hotel has an indoor pool, a health club, 13 restaurants and lounges, a duty-free shop, and a theater ticket agency. Underground tunnels connect the hotel directly to the downtown air and railway terminals, the subway system, and to Toronto's labyrinth of underground shopping.

A limited number of rooms are still available at the Harbour Castle and an ample supply of rooms at the Royal York, both at special rates. When making reservations, be sure to indicate that you are attending the First Global Conference on the Future. Both hotels take all major credit cards. The rates for rooms still available are:

Harbour Castle

One Harbour Square	Single room
Toronto, Ontario	\$60 \$70
M5J 1E3, Canada	Double/Twin
(416) 869-1600	\$77 \$82

Royal York

100 Front Street W.	Single
Toronto, Ontario	\$48 \$53 \$57 \$61
M5J 1E3, Canada	Double
(416) 368-2511	\$62 \$67 \$71 \$75

These special conference rates are in Canadian dollars, per day. The Canadian dollar is currently worth approximately 85 U.S. cents, which translates into a savings of 15% for U.S. residents.

Note: There are two Hilton Hotels in Toronto. The conference will be at the Harbour Castle Hilton.



Strategically located at the center of Lake Ontario's "golden horseshoe," Toronto is only a pleasant day's drive away for about 100 million people. By air, it is only a one-hour direct flight away from about a third of the cities in the United States. Toronto is the focal point of Air Canada's route system and is also served by American, United, Eastern, and other major air carriers.

"Place of Meeting"

TORONTO

Toronto, Canada's largest city, is a blend of great natural beauty, imaginative architecture, and a cosmopolitan population that creates a lively setting for the First Global Conference on the Future.

Fortune magazine has called this bustling multicultural metropolis of 2.5 million people "the world's newest great city." *National Geographic* has described it as "one of the most civil and civilized cities in the Americas." Toronto (a Huron Indian word for "place of meeting") is already a major convention center. Its tourist attractions appeal to a wide variety of people; its attractive subway is inexpensive (60 cents), reliable, and safe; and its hotels cover a wide range of services and costs. It has splendid waterfront parks and a varied collection of restaurants and nighttime entertainment.

Conference participants bringing their families will find Toronto ideal for a summer vacation because of the wide variety of tourist attractions. Among the highlights are the CN Tower, the world's tallest free-standing structure; Ontario Place, a 96-acre park on Lake Ontario with a unique variety of entertainment facilities; the Ontario Science Centre; the new City Hall; Casa Loma, a 98-room turreted castle; the Metro Toronto Zoo; Eaton Centre, a glittering new glass-enclosed downtown shopping mall; the Art Gallery of Toronto; Massey Hall, home of the Toronto Symphony; Old Fort York, which played a major role in the War of 1812; the Hockey Hall of Fame; Queen's Park; the Ontario Parliament buildings; and the Toronto Islands. Impressive architecture can be seen in the form of St. Michael's Roman Catholic Cathedral, St. James Anglican Cathedral, and Metropolitan Cathedral.

Cultural events can be taken in at the O'Keefe Centre, the St. Lawrence Centre for the Arts, the Royal Alexandra Theatre, and others.

There are over 4,000 restaurants in the metropolitan area, and many operate different sorts of rooms under the same roof. Toronto is an excellent city for shopping, with the highlights including Eaton Centre, Simpson's department store, the Bay/Bloor/Yorkville areas, and the Underground, a six-block area of underground shopping malls, theaters, restaurants, and walkways connecting City Hall and Union Station.

Toronto is filled with activities that children can enjoy. Children's Village at Ontario Place is considered by many to be the world's greatest playground, with features such as the Earth Box Crawl, Soda Fountain Mountain, the Water Pistol, the Rope



CN Tower



Toronto Harbour Castle Hilton Hotel



Toronto City Hall

Net Climb, the Moon Walk, a tree house, a punching bag forest, etc. Toronto Island Park is the site of Centreville, an amusement park that is a child-sized replica of a nineteenth-century Ontario village. Ontario Science Centre, very popular with youngsters, has more than 500 elaborate exhibits, many of which require audience participation.

The average temperatures for Toronto in July range from sunny daytime highs of 80°F to nighttime lows of 62°F. A light sweater, all-weather coat, or windbreaker jacket may be required for some evening events.

Toronto has been widely praised as an exciting city and, perhaps more importantly, as a city that works. *Washingtonian* magazine has said of Toronto, "It is clean, It has good, cheap, well-used transportation. The streets are clean and safe. There are virtually no slums or decaying neighborhoods. Growth and investment are booming. Toronto is so successful that journalists and planners and public officials go there to see how it works."

City of Toronto Proclaims Global Conference Week as "Futures Week"

The Municipality of Metropolitan Toronto has proclaimed the week of July 19 to 27, 1980, as "Futures Week." Metro Toronto Chairman Paul Godfrey has sent the following message to conference delegates:

"As chairman of the municipality of Metropolitan Toronto, it is a pleasure to extend best wishes and a warm welcome to all delegates to the First Global Conference on the Future.

"We are indeed honoured to be the host municipality for this international event of major significance. Your objectives of sharing concerns with each other and people from all walks of life to increase awareness and understanding are admirable ones.

"While you are with us I hope your schedule will allow you to enjoy some of the many attractions Metropolitan Toronto has to offer our visitors.

"The future is certainly a topic which concerns all of us, and I wish you most productive deliberations during Futures Week, July 19 to 27, 1980."

WORLD FUTURE SOCIETY

An Association for the Study of Alternative Futures

The Society is an association of people interested in future social and technological developments. It is chartered as a non-profit scientific and educational organization in Washington, D.C., and is recognized as tax-exempt by the U.S. Internal Revenue Service. The World Future Society is independent, non-political and non-ideological.

The purpose of the World Future Society is to serve as an unbiased forum and clearinghouse for scientific and scholarly forecasts, investigations and intellectual explorations of the future. The Society's objectives, as stated in its charter, are as follows:

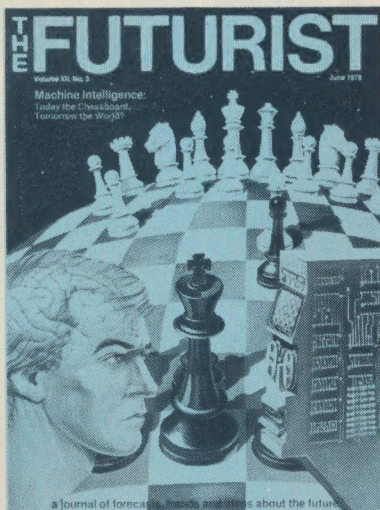
1. To contribute to a reasoned awareness of the future and the importance of its study, without advocating particular ideologies or engaging in political activities.
2. To advance responsible and serious investigation of the future.
3. To promote the development and improvement of methodologies for the study of the future.
4. To increase public understanding of future-oriented activities and studies.
5. To facilitate communication and cooperation among organizations and individuals interested in studying or planning for the future.

Membership is open to anyone seriously interested in the future. Since its founding in 1966, the Society has grown to more than 50,000 members in over 80 countries. Most members are U.S. residents, with growing numbers in Canada, Europe, Japan, and other countries. Members include many of the world's most distinguished scientists, scholars, business leaders and government officials.

SOCIETY PROGRAMS

THE FUTURIST: A Journal of Forecasts, Trends, and Ideas About the Future.

This unique bimonthly journal reports the forecasts made by scientists and others concerning the coming years. It explores the possible consequences of these developments on the individual, institutions and society,



and discusses actions people may take to improve the future.

Publications

The Society publishes books, reports, films, and other specialized documents on future-related areas, including works such as *The Study of the Future*, *The Future: A Guide to Information Sources*, and many other stimulating, useful guides to the future.

Book Service

World Future Society members can purchase books, audio tapes, games and other educational materials dealing with the future, at substantial savings. The Society's unique "Bookstore of the Future" carries about 300 titles.

Tape Recordings

The Society has a rapidly growing inventory of more than 100 audio

tapes available at low cost to members. This cassette series includes coverage of most major areas and issues of the future, such as science and technology, government, education, environment and human values.

Chapter and Local Activities

Society chapters and local activities in many cities offer speakers, educational courses, seminars, discussion groups and other opportunities for members to get to know each other. They provide personal contacts with people interested in alternative futures.

Meetings

Meetings offer special opportunities for participation and interaction. The *General Assemblies* are large, multi-disciplinary convocations where Society members can hear and meet frontier thinkers and doers. The Second General Assembly, held in June, 1975, drew 2,500 participants, and the third is already scheduled for July 20-24, 1980, in Toronto, Canada. Specialized conferences are also held, such as a conference on "Communications and Society" in November 1977 and annual conferences on education since 1978.

Future Times

This informative publication covers meetings, activities, new books, tapes, films, and other information of interest to members. It is sent to all members regularly at no charge.

WORLD FUTURE SOCIETY

4916 St. Elmo Avenue
Washington, D.C. 20014 • U.S.A.

Membership Application



I would like to join the World Future Society and receive THE FUTURIST as one benefit of my membership. Annual dues throughout the world are \$18 in U.S. currency or its equivalent. 80% of dues is designated for subscription to THE FUTURIST.

☐ Enclosed is my first year's dues of \$18.

☐ Please bill me.

☐ Charge my credit card: ☐ Master Charge ☐ VISA

Card No. _____ Expiration date: _____

Name _____

Address _____

City _____ State (Province) _____ ZIP Code or Country _____

Occupation _____

☐ An organization or individual wishing to subscribe to THE FUTURIST without joining the Society can do so simply by checking this box. The same rates apply, but subscribers do not receive other membership benefits.

Conference/Seminar Registration Form

Please Print

Name _____
Last First Middle Initial

Title _____

Affiliation _____

Full Mailing Address _____

Method of Payment

- ☐ Check or Money Order
☐ Credit Card (Please supply following information)

☐ Master Card # _____

☐ VISA (BankAmericard) # _____

Expiration Date: _____

Date _____

Signature _____

Remittance should be made to:

World Future Society
4916 St. Elmo Avenue
Washington, D.C. 20014 • U.S.A.

Hotel information will be mailed to all registrants directly from Toronto.

CONFERENCE

Type of Registration	Before June 30, 1980		After June 30, 1980		No. of Registrations	Amount Due
	WFS Member	Non-Member	WFS Member	Non-Member		
Full Registration (includes ticket to Opening Reception/Buffer, and copy of the Conference Volume—a collection of papers by participants)	\$125	\$145	\$140	\$160	_____	_____
Economy Registration (admission to sessions only)	\$ 95	\$115	\$110	\$130	_____	_____
Youth Program \$30					_____	_____
Membership in the World Future Society \$18					_____	_____

Amount for Conference: \$ _____

EDUCATIONAL COURSES AND SEMINARS

Course or Seminar	Course/Seminar Fee		No. of Registrations	Amount Due
	WFS Members*	Non-Members		
Pre-Conference				
C-1 Teaching Futures	\$65	\$75	_____	_____
C-2 Futurics: Perceiving Things to Come	\$95	\$110	_____	_____
C-3 The Responsibilities of Futurist Thinkers	\$95	\$110	_____	_____
C-4 Values and the Future	\$145	\$160	_____	_____
C-5 Emerging Issues Identification: Fitting into the Planning Process	\$195	\$210	_____	_____
C-6 Technological Forecasting	\$195	\$210	_____	_____
Post-Conference				
C-7 Early Warning Signals	\$195	\$210	_____	_____
C-8A Management for the 80s (July 25)	\$195	\$210	_____	_____
C-8B Management for the 80s (July 26)	\$195	\$210	_____	_____
C-9 Advanced Methods in Futures Research	\$295	\$310	_____	_____
C-10 Public Policy Forecasting and Issues Management	\$295	\$310	_____	_____
C-11 Technology Assessment	\$295	\$310	_____	_____
C-12 Promises of Practitioners vs. Expectations of Users: A Critical Look at Futures Planning and Research	\$295	\$310	_____	_____

Amount for Education Courses or Seminars: \$ _____

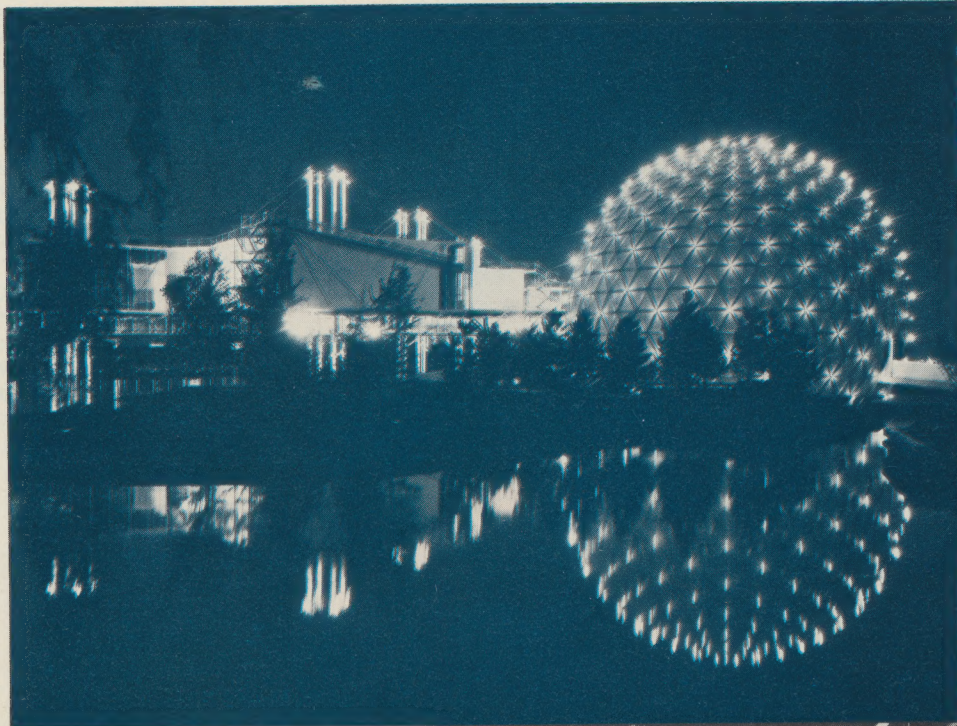
Note: "Early Bird" registrants (those who registered before December 31, 1979) may subtract a 10% discount from their course/seminar fees.

TOTAL AMOUNT ENCLOSED: \$

(Conference and Courses/Seminars)

Hotel reservation forms will be sent with the acknowledgement of conference registration.

*Members price also applies to Canadian Futures Society members.



**WORLD
FUTURE
SOCIETY**

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CARRIER: If addressee has moved, please leave with current occupant.